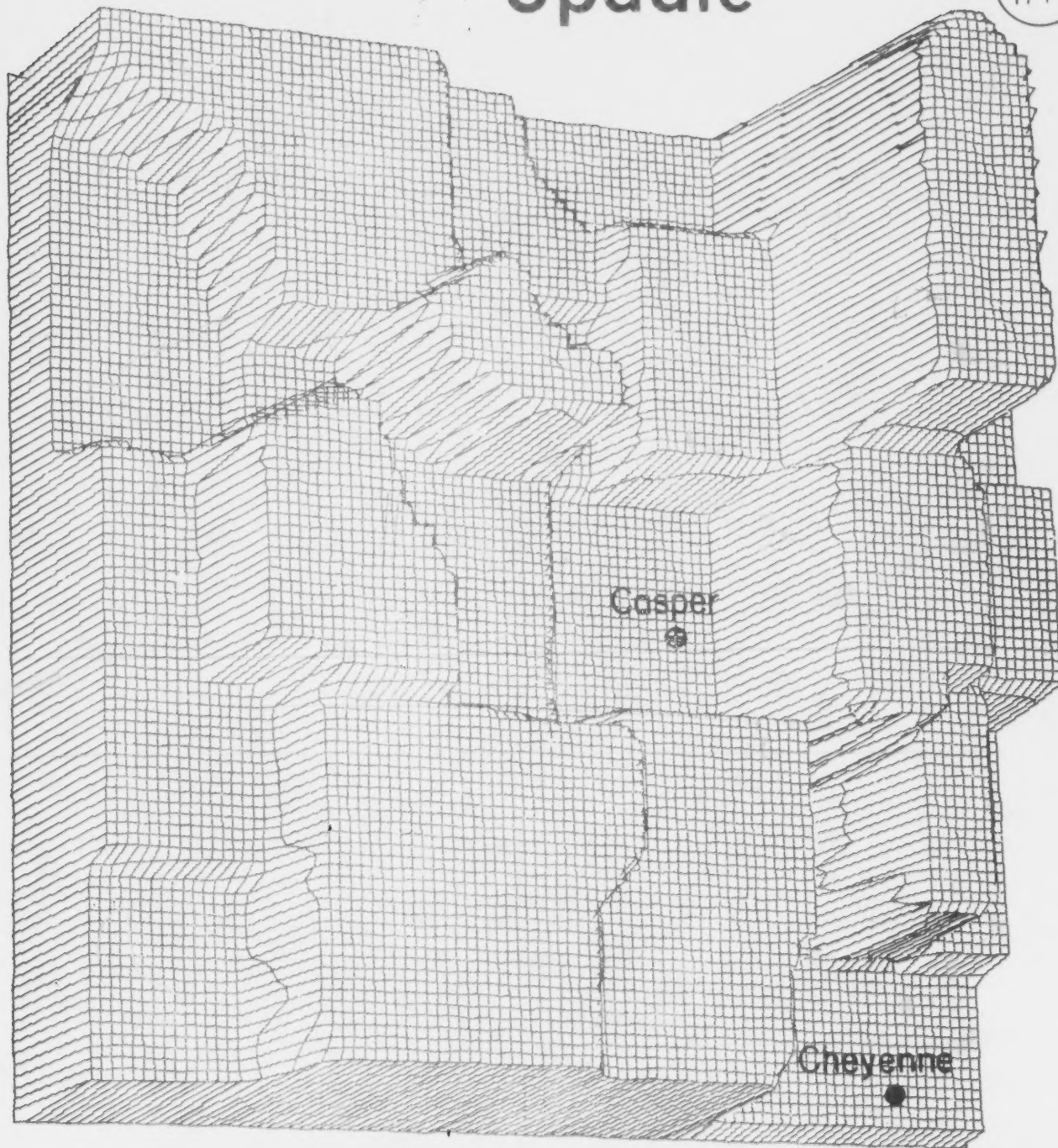


BEST AVAILABLE COPY

AB83 69750-22

Wyoming Quarterly Update

Fall 1982
Volume 2, No. 1



1980 Per Capita Total Assessed Property Value

LAST CHANCE: TO STAY ON OUR MAILING LIST
PLEASE RETURN THE ENCLOSED CARD.

Disregard if you sent in the card enclosed in the Summer WQU.

Wyoming Quarterly Update

Wyoming Quarterly Update (WQU) represents the efforts of the Institute for Policy Research (IPR) at the University of Wyoming to provide improved data access services. The data presented in WQU are assembled from secondary sources, such as government agencies and private industry. The staff of IPR greatly appreciates the ongoing cheerful cooperation of each of the data sources listed in the bibliography.

WQU provides current economic indicators and timely, easily accessible data. Most of the data published in WQU are updated quarterly with the most current numbers. The complete data sets from which WQU originates are maintained, together with documentation, in machine-readable form by IPR. Readers are encouraged to contact IPR to find out how to gain access to and use the on-line data system. Many data series, such as gasoline sales and taxation data, span more than 30 years. Numerous other series cover 20 years or more.

Efforts to expand the subject and geographic detail (county level data) of data sets will be made continuously. Featured for the third time in this edition are county profiles. Current data, graphics, and discussion are presented for Laramie and Natrona counties in this edition. Each subsequent edition of WQU will feature two to three county profiles. At that rate, each Wyoming county will be covered every two to three years. Current plans are to cover Converse and Niobrara counties in the next WQU (December, 1982). No firm plans have been made to present particular counties in the March, 1983, WQU. Suggestions by readers will be considered in making that decision.

The cover page of each edition features a contour map which illustrates the geographic distribution of a particular variable. This edition features a contour map which contrasts county per capita total assessed property valuations. For instance, the lowest areas are the counties with the lowest 1980 assessed valuation per capita.

First-time readers of WQU should refer to the "Format" (last page) for an explanation of numerical codes and table formats.

For additional information, to make suggestions, or to request data, contact WQU project manager John Merrifield at:

The Institute for Policy Research
University Station, Box 3925
Laramie, WY 82071
(307) 766-5141

LAST CHANCE

IF YOU DID NOT RETURN THE CARD ENCLOSED IN THE LAST ISSUE OF
WYOMING QUARTERLY UPDATE, AND YOU WISH TO REMAIN ON OUR MAILING
LIST, PLEASE RETURN THE ATTACHED POSTCARD!

Institute for Policy Research
College of Commerce and Industry
and College of Arts and Sciences
University of Wyoming

Table of Contents

Introduction	1
Table of Contents	11
Wyoming Scene	1
Minerals Outlook	3
Agricultural Outlook	6
Energy and Mineral Production	
Figure 1	8
Table 1	9
Agriculture	
Figure 2	10
Table 2	11
Tourism	
Figure 3	12
Table 3	13
Employment and Labor	
Figure 4	14
Table 4	15
Business Conditions	
Figure 5	16
Table 5	17
Construction	
Figure 6	18
Table 6	19
Utilities	
Figure 7	20
Table 7	21
Consumers	
Figure 8	22
Table 8	23
Comparative Cost of Living Index	24
Personal Income, Employment, Transfer Payments, and Dividend Interest and Rent for Wyoming Counties	25
Government	
Figure 9	28
Table 9	29
Education	
Figure 10	30
Table 10	31
Vital Statistics	
Figure 11	32
Table 11	33
Primary Care Physicians by County	34
Wyoming Medical Facilities	35
Banking and Finance	
Table 12	36
Laramie County Profile	37
Natrona County Profile	45
Key to Units Code	53
Bibliography	53
WQU Format Description	55

Project Manager.....	John Merrifield
Editorial Advisors.....	Shelby Gerking G. Fred Doll
Copy Editor.....	Kate Missett
Word Processing.....	Lorri Fuhs Pedersen
Editorial Assistance.....	Beth Daniels
Research Aide.....	Ruth Tebbutt
Graphics	

Cover Page, Figures 13, 15, Maps 1-2.....University of Wyoming
Graphic Arts Services

Figure 1-12, 14,.....Computer Graphics Package

Wyoming Quarterly Update is published four times per year in autumn, winter, spring, and summer editions.

Admission, employment, and programs of the University of Wyoming and the State of Wyoming are offered to all eligible people without regard to race, color, national origin, sex, religion, or political belief.

The articles appearing in this publication represent the opinions of the authors and do not necessarily reflect the views of the state of Wyoming or the University of Wyoming or their respective executive officers. Duplication or quotation of material in this publication is welcomed, but it is requested that WQU, the Institute for Policy Research, University of Wyoming, be credited.

Perspective on the Wyoming Scene

by John Merrifield

The most recent data for the nation's economy supports the widespread belief that the recession hit bottom during 2/82, and that some sort of recovery is now underway. According to Commerce Secretary Malcolm Baldrige, recent data are "encouraging evidence that the economic recovery is about to get underway" (Wall Street Journal, 9/1/82). While there is a substantial basis for optimism, much of the economic news is still bad. As Labor Day rallies here in Wyoming and throughout the nation demonstrated, the nation's record unemployment rate of 9.8 percent in July and August (Business Week, 9/13/82) was regarded as alarmingly high. A comparison of July and August unemployment data shows that the number of discouraged workers, those no longer counted as unemployed because they have given up trying to find work, has increased. Unemployment among adult males, the traditional backbone of the nation's labor force, also increased. The Reagan Administration predicted that the unemployment rate would fall to 9.1 percent during 4/82 and average about 8.4 percent throughout 1983 (Business Week, 9/13/82). While no one would describe an unemployment rate of 8.4 percent as acceptable, it would represent a substantial improvement over current conditions, especially given the expected 1.6 percent annual growth of the labor force through 1990 (USNWR, 8/23/82).

Also on the gloomy side were the latest statistics on business failures. The 572 business failures recorded during the week of August 23 were the most for any week this year (United Press International (UPI), 9/3/82). So far this year, 15,133 businesses have gone under, a 44.2 percent increase over the same period last year. According to Dun and Bradstreet, businesses were failing during the first half of 1982 at the highest rate since the Great Depression.

A fall in short-term interest rates was behind much of the good economic news. The prime interest rate fell two percentage points in less than a month, placing it at 13.5 percent, the lowest it has been in nearly two years (UPI, 8/21/82). The sudden plunge in short-term interest rates set off several record-shattering rallies in the stock market, including four consecutive days where volume exceeded 100 million shares. As August ended, the Dow Jones Industrial Average topped 900 for the first time in over a year. The decline in interest rates is due primarily to an easing of the Fed's credit policy, which was reflected in four successive cuts in the discount rate, the charge to member banks for funds borrowed from the Fed. The Fed's discount rate had been 12 percent from December 4, 1981, until July 19, but currently stands at 10 percent (UPI, 8/14/82). Other forces behind the drop in short-term rates were increased savings and a decline in the demand for credit by recession-ravaged businesses. Economist Henry Kaufman of Salomon Brothers, whose prediction of lower interest rates helped set off the initial stock market rally, said that interest rates would drop because the recession would curtail investment plans of many businesses longer than he first predicted (UPI, 8/19/82).

Unfortunately, for some time the drop in interest rates was limited largely to short-term lending. Long term interest rates, important for reviving the ailing auto and home construction industries, eventually fell slightly in response to the Fed's less restrictive monetary policy. One notable exception was the Security Savings and Loan Association of Milwaukee, largest thrift in Wisconsin, which lowered mortgage interest rates from 16 to 11.9 percent (USNWR, 9/6/82). The average 30-year mortgage currently stands at 15.88 percent, a rate still regarded as prohibitively high by most prospective home buyers (USNWR, 9/13/82). According to the Wall Street Journal (WSJ, 8/31/82), 1982 housing sales through July are off 10 percent from last year's record-low sales pace. A recovery in new car sales is not expected until 1983 at the earliest (WSJ, 9/1/82). According to Business Week (9/13/82), the differential between long and short-term interest rates is diverting funds away from capital investment and into long-term debt financing instruments.

The outlook for interest rates is confused by questions about the eventual extent of the recovery, federal deficits and consumer spending-savings habits. Perhaps the best news of all for the long-run health of the economy is the sharp increase in the savings rate. After hovering around 6 percent throughout the last half of the 1970s, the percentage of disposable income saved by Americans now stands at 8.1 percent (Business Week, 9/13/82). Because of a built-in underestimation bias (due to data limitations), the actual savings rate may be as high as 9.4 percent. At current income levels, each percentage point increase in the savings rate adds about \$22 billion to the pool of funds available to finance business investment and government deficits. Furthermore, by putting more money into investments and less into consumption, Americans are cooling the fires of inflation. The additional funds will reduce the impact of large federal budget deficits. Projections of the deficit for the fiscal year, which begins October 1, ranged from \$115 billion by the Reagan Administration to \$163 billion by several leading economists (WSJ, 9/1/82). The Congressional Budget Office projected \$150 to \$160 billion deficits for each of the next three fiscal years (UPI, 9/2/82).

Other good news included a 1.3 annual rate of increase in the nation's gross national product (GNP). Revised figures indicated that 4/81 and 1/82 GNP fell at annual rates of 5.3 and 5.1 percent, respectively (Time, 9/6/82). The U.S. Commerce Department's Index of Leading Indicator's advanced 1.3 percent in July, the fourth straight month in which it increased (WSJ, 9/1/82). Since March, the leading indicators have advanced 3.8 percent (Business Week, 9/13/82). According to Business Week (9/13/82), postwar experience suggests that such an advance makes a quick recovery from the recession an odds-on bet.

Declines in factory capacity utilization and second quarter corporate profits could also be viewed as signs of improvement. The reason for viewing the declines in a positive light is that

the slippage was much less than in previous periods. Factory production slid only 0.1 percent during July, following much larger drops in each of the three previous months (USNWR, 9/6/82). With the nation's factories operating at less than 70 percent of capacity, the 3.2 percent increase in new orders for durable goods was very welcome news. Still, with high inventories and substantial unused capacity, more new orders will be needed before large numbers of furloughed workers can be recalled. Second quarter corporate profits fell only 0.8 percent from the previous quarter, a substantial improvement from the near-record 20 percent difference between 1/82 and 4/81 corporate profits (USNWR, 9/6/82).

The sudden turnaround in energy prices in May and June prompted a brief return to double-digit inflation. However, the seasonally adjusted annual rate of inflation fell to 7.3 percent at the consumer level in July (USNWR, 9/6/82), and to 7.1 percent at the wholesale level (UPI, 8/14/82). Rising energy costs were offset by a drop in food prices. The increase in energy prices is viewed as an adjustment, and is not expected to maintain its current pace. The rate of increase in consumer prices is expected to stay between 6 and 7 percent for the rest of 1982 and all of 1983 (USNWR, 9/6/82).

Despite increases in GNP, the four-month advance in the leading indicators, and other economic bright spots, the duration of a recovery and the long-run health of the economy are still uncertain. Some analysts fear that the just-enacted \$99 billion tax hike will snuff out a prolonged recovery, especially if high interest rates linger. Among those holding that view is Congressman Jack Kemp, coauthor of the three-year, 25 percent, supply-side tax cut (USNWR, 8/23/82). Naturally, supporters of the tax hike, including President Reagan, do not share that view. Budget deficits and continuing complaints about a complex, lengthy, and inequitable tax code are prompting Congress to take a long look at a flat rate tax as a substitute. Such a move would have widespread economic repercussions by altering many of the incentives built into the current system. Americans are still in the process of adjusting their budgets to the increases in their disposable incomes resulting from the first of two 10 percent tax cuts this July. Early indications are that about half of the increased income is being saved, a very positive trend if it continues. A constitutional amendment requiring a balanced budget is awaiting further action from Congress. No one publicly opposes the concept of a balanced budget, but severe reservations have been expressed about its viability, enforceability, and potential impact on the legislative process. In the more immediate future, Congress must find additional budget cuts and/or revenue enhancers, while grappling with the politically sensitive issue of how to rescue the near-bankrupt Social Security system. Regardless of how Congress chooses to act on those issues, there will be some economic fallout.

Here in Wyoming, it appears that the nationwide recession is being felt in earnest for the first time. In light of Federal Reserve Board data showing which industries, nationwide, have been hardest hit by the recession, it's not surprising that shock waves have found their way to Wyoming industries (USNWR, 8/23/82). Eight of the nation's 19 hardest hit industries are linked to major Wyoming industries. Iron and steel (#1, the hardest hit by the recession) firms purchase Wyoming's iron ore. As a result of U.S. Steel's layoffs in Fremont County, its unemployment rate reached 11.1 percent this July, the state's highest and up from 5.7 percent in July, 1981 (Casper Star Tribune, 9/3/82). The iron ore is shipped as taconite pellets, which are formed from Wyoming bentonite and the ore. Oil and gas drilling (#3) is down because of reduced demand and high interest rates. Since bentonite is used by drilling rigs as a lubricant, reduced drilling affects bentonite production as well as oil and gas production. Wyoming active rig count reached a four-year low of 112 on August 30. Chemicals and synthetics (#5) industries rely heavily on petroleum products for fuel and raw materials. Household furniture (#12), ships and boats (#13), and lumber products (#14) use inputs such as wood from Wyoming forests and steel products made from our coal and iron ore. Automobiles (#18) require steel, and are made with glass manufactured partly from Wyoming trona. Demand for electric power (#19) is down. That has had a major impact on Wyoming's coal and uranium industries.

In spite of ripple effects of major industries' problems affecting Wyoming's economy, the situation here is still the envy of most other states in the union. Wyoming's 1981 per capita income of \$11,780 ranked first in the Rocky Mountain region and fifth in the nation. It represented an 8.3 percent increase over 1980. While the July, 1982 unemployment rate of 5.6 percent was considerably higher than the July, 1981 rate of 3.5 percent, it still compares very favorably with the national unemployment rate of 9.8 percent. Some of the increase in Wyoming's unemployment rate is due to immigration of job-seekers from other states. Even though the ranks of the unemployed swelled to a 19-year high, the labor force and the number of employed persons also grew (UPI, 9/1/82). The annual rate of growth of Wyoming's labor force of 4 percent was twice the national average, but is also well below the 7 to 9 percent growth rate of the mid-1970s.

The most recent estimate of Wyoming's rate of inflation (for the year ending June 30) indicated that at 5.6 percent it was only slightly more than half the rate for the preceding twelve months (10.7 percent). For the year ending June 30, the nation's rate of inflation was 6.9 percent.

There are also signs that the current slowdown is temporary. Several firms recently showed their confidence in the future coal markets by acquiring leases to large, new tracts of Powder River Basin coal reserves. A vast export market for coal exists. Lack of adequate port facilities is the main obstacle to translating those export demands into increased sales. The Hampshire Energy Synfuels Plant to be located in Campbell County moved a step closer to feasibility when it received water permits from the State Engineer's office. The federal Synthetic Fuels Corporation will decide on loan and price guarantees for the project this fall.

(UPI, 8/7/82). If all goes according to plan, the \$2 billion plant will be producing 20,000 barrels of unleaded gasoline from 15,000 tons of coal daily by 1987.

Prospects for the continued expansion and profitability of Wyoming's natural gas industry are excellent. The vast Riley Ridge field in southwest Sublette County was discovered in the 1960s, but production only recently became economically viable. Price increases are expected to average 20 percent higher nationwide during this upcoming winter compared to last winter (USNWR, 9/13/82). Complete natural gas price deregulation looms in 1985.

Wyoming's important tourist trade again showed itself to be nearly recession-proof. The data presented in Table 3 of this WQU supports that conclusion, as does the recent employment data for Teton County. Tourism is more important to Teton County than any other county in Wyoming. Described as "booming" by the Casper Star Tribune (9/3/82), Teton County, with a July unemployment rate of 2.0 percent, was the only county to show improvement in that statistic compared to a year ago.

While other state budgets have been hard-hit by the recession, it appears to have had only a negligible impact on Wyoming's treasury. Led by an increase in sales and use tax revenues of 17 percent, and revenues collected from the new 2 percent severance tax on oil and gas, the state's total revenues for fiscal year 1982 were 36 percent greater than the year before. The general fund received more than it spent (see Table 9), despite record numbers of welfare recipients and other recession-related expenses.

While it may take as long for ill effects of the recession to leave Wyoming as it took them to arrive, the situation here will remain in much better shape than nationwide. Wyoming's important mining and agriculture sectors are discussed in greater detail in the following pages.

Fall Minerals Outlook

OVERVIEW

by Gary B. Glass, State Geologist, Wyoming Geological Survey

Although the fall outlook for Wyoming's mineral industry is quite gloomy at first glance, one should not lose sight of the fact that coal and natural gas production, in particular, are still showing annual increases despite poor economic times. Although oil production is declining, the assessed price is still increasing each year and revenues from this industry should continue to increase despite the decline in production. Trona, bentonite, iron ore, and sand and gravel production have fallen in response to recessionary declines, but can recover quickly when economic conditions improve. The state's uranium industry has experienced the most serious cutbacks, with little chance for a significant recovery in the near future. The more optimistic forecasts suggest uranium production may exceed 3 million tons per year for the next five years. Our more conservative estimate is that uranium production will level off at about half of 1981's 4.6 million tons until 1986. There is a chance that production could reach 3.3 million tons by then.

MINERALS

by Ray E. Harris, Uranium and Industrial Minerals Geologist, and
W. Dan Hausel, Deputy Director, Wyoming Geological Survey

No improvement is in sight for the depressed uranium industry in Wyoming. Uranium production is currently at about half of 1981 production levels.

Several factors continue to influence the depressed market: utilities (users of 95 percent of all uranium production) have enough concentrate stockpiled to last until 1986; spot market prices continue to decline (the current price of uranium oxide is \$18.50 per pound, down from \$44.50 per pound in 1978); and electricity production in 1981 increased only 0.3 percent (nuclear energy's share of total electricity production increased 8.4 percent, to 11.9 percent of all electricity produced). The slow growth rate of electricity production (expected to be less than 0.8 percent in 1982) has extended the uranium stockpile and has contributed to today's unfavorable market. No improvement is forecast for the next quarter, or for 1983.

The reduced demand for chemicals and glass (particularly auto glass) has contributed to a decline in trona production, which is down about 6 percent from last year. This decline is expected to continue through 1982. Several trona refiners have announced production cutbacks and layoffs. Tenneco's new facility started operations last quarter at a rate slower than previously announced. Their production is not expected to increase the total production of trona from Wyoming.

Bentonite production is expected to decline as a result of a decrease in the use of drilling mud, foundry castings, and taconite (iron ore) pelletizing due to reduced oil drilling and reduced demand for iron and steel.

An increase in exploration activity for rare-earth and rare elements (such as niobium, tantalum, europium and cerium) was noted this summer. This activity centers primarily in the mountainous areas of south-central, northern, and northeastern Wyoming.

Exploration for economic gold deposits in Wyoming continue at one of the highest peaks of activity in the state's history. With the price of gold currently near \$400 an ounce, exploration is expected to continue through the fall quarter.

To date, the only reported significant gold discovery was that by Wyoming Geological Survey geologists who located significant gold associated with quartz veins and iron formations in the Bradley Peak area of the Seminoe Mountains north of Rawlins. The announcement by the W.G.S. led to a claim-staking rush by numerous mining companies from around North America. During the summer, Timberline Minerals Inc. reported preliminary results on their recently acquired property in the Bradley Peak area near the site of the W.G.S. discovery. Timberline reported their property to contain rock averaging 0.28 ounces of gold per ton. No other results were available. More detailed discussions on the Bradley Peak deposits are published in Wyoming Geological Survey reports--Gold Districts of Wyoming, and Ore Deposits of Wyoming. These are available at a minimal cost through the State Geological Survey.

Exploration for base and precious metals in Wyoming's Overthrust Belt picked up through the summer and is expected to continue at an accelerated pace until the snow falls. No major discoveries are reported from this region to date.

Wyoming's iron ore industry continued to have its problems, as did the remaining U.S. iron industry. U.S. Steel's Atlantic City Mine near Lander extended a two-week maintenance shutdown to six weeks in an attempt to reduce inventories. Operations resumed on August 22 following the shutdown, although mining is scheduled to again halt at the end of September. Operations may then resume on November 1st if there is an improvement in the economic climate--if not, the mine will close indefinitely, affecting more than 500 employees from the Lander area. The Atlantic City Mine supplies taconite (iron ore) pellets to the Geneva Steel Works at Provo, Utah, where operations are presently at 50 percent of total capacity. More than 1,500 of the 4,900 workers at Geneva have already lost their jobs.

Diamond exploration activity in Wyoming is expected to decline during the fall quarter because of a worldwide slump in the diamond market. The slump results from large diamond inventories held by wholesalers and from a drastic price drop for investment-grade diamonds. Jewelry continues to sell at about the same 1981 prices, although investment-grade diamonds are averaging price declines of as much as 75 percent.

COAL

by Richard W. Jones, Staff Coal Geologist, Wyoming Geological Survey

Forecasts for Wyoming coal production in the next nine years have been revised to reflect a continued downturn in market demand. Our current estimate for Wyoming's 1982 production is now only 107 million tons, a downward revision from 112 million tons predicted earlier. This represents only a 5 percent rate of growth from 1981. Although actual production will still be less than contracted production, the percentage increases from year to year in actual production closely parallel the percentage increases in contracted production.

The great decrease in coal production in southern Wyoming (especially in the Hanna Basin) has been more than offset by continued growth of Powder River Basin coal mines. Actual production is still expected to be less than contracted production in the next nine years, which reflects the current trend towards conservation and decreases in the expected demand for power.

Repercussions from the Powder River Basin federal coal lease sale held in April of this year continue. The bid on one of the tracts in Wyoming was rejected by the Department of Interior because it did not meet the fair market value as determined by that agency after the sale. Texas Energy Services and Northwestern Mutual Life Insurance, the high bidders on the tract, have appealed the rejection. In addition, the bid on the Spring Draw tract by Shell Oil Company failed the Justice Department's initial antitrust review. The Justice Department will be examining Shell's coal holdings in more detail now to determine whether or not it owns too much coal under lease to be eligible for additional coal leases.

A Congressional hearing was held in July on the lease sale and an investigation of the sale is being conducted by the General Accounting Office. Meanwhile, the suits filed by the Northern Cheyenne tribe and several conservation groups against the Department of the Interior to halt the issuance of leases from the lease sale are still pending. The State of Wyoming has intervened in the suits (now consolidated into one case and transferred to U.S. District Court in Billings, Montana) which will probably go to trial this fall.

In a matter related to bidding on coal lease tracts, the final rules on federal coal management went into effect on August 30. Several of the procedures used in the Powder River Basin lease sale have now been adopted as rules. An entry level bid system, in which the minimum bonus bid on a coal tract may or may not be equal to the fair market value of the coal, is now used in all coal sales. Evidently, this was done to discourage one from simply bidding on a tract at the minimum and assuming that it would be fair market value. Now the fair market value will be determined in part from the competition at the lease sale. Because of the criticism that the bids at the Powder River lease sale were too low, the minimum bonus bids have been raised from \$25/acre to \$100/acre and the oral bidding that used to follow the opening of sealed bids has been eliminated to force higher sealed bids.

Despite all the controversy that still exists over the first Powder River lease sale, additional sales to reoffer three tracts in Montana, to reoffer the Rocky Butte, Wyoming, tract and to offer the Fortin Draw, Wyoming, tract have been announced for this fall.

In transportation, it now appears that another railroad company, the Chicago and North Western Transportation Company (C&NW) will be competing with Burlington Northern (BN) in the near future for a share of the Powder River Basin coal hauling business. The Interstate Commerce Commission recently approved financing agreements that C&NW and Union Pacific (UP) made with a group of banks. Under this plan, C&NW and UP will obtain financing for 75 percent of the construction costs of upgrading 45 miles of existing C&NW track in Wyoming and building 53 miles of new track southward to Joyce, Nebraska, to intersect with UP track. The remaining construction costs will be borne by C&NW and UP. In addition, C&NW will pay BN for half interest in the new line south of Gillette that BN completed in 1979. It is thought that if the new rail line is built and reasonable freight rates can be negotiated with C&NW and UP, the markets for Powder River coal could increase greatly. Meanwhile, the source of water for the Energy Transportation Systems, Inc. (ETSI) coal slurry pipelines continues to be a controversial issue. Most recently, the states of Iowa, Nebraska and Missouri have jointly filed a suit against the U.S. Department of Interior and the Army Corps of Engineers for approving the use of Missouri River water by ETSI for their coal slurry line. Other suits have been filed against the federal government by the Kansas City Southern Railway Co., the Sierra Club, and the Nebraska, Iowa, and Rocky Mountain Chapters of the Farmers Union to halt the sale of Missouri River water from the Oahe Reservoir in South Dakota to ETSI.

In other developments concerning Wyoming coal, Hampshire Energy Company continues to be a first round finalist for federal funding from the U.S. Synthetic Fuels Corp (SFC) for a proposed coal-to-gasoline plant southeast of Gillette. A decision on awards for first round finalists is expected from SFC in November of this year. Hampshire received 15 water well permits from the State of Wyoming in August, but a hearing on the project slated for September 21 was postponed for 30 days because certain information was not supplied to the State Industrial Siting Council. In a related development, two of Hampshire's partners recently had their bid on a federal coal lease tract (Rocky Butte) adjacent to their 900-acre plant site rejected. Hampshire is currently negotiating coal contracts with permitted coal producers for the five million tons of coal per year the plant will require, and was evidently not relying on obtaining the Rocky Butte tract as the primary coal source. The Rocky Butte tract will be reoffered for sale in the fall of this year.

The layoff of workers and the cutback in coal production at the Spring Creek coal mine near Decker, Montana, is having a positive effect on several eastern Powder River Basin coal mines in Wyoming. When coal shipments from Spring Creek to two Texas utilities were drastically reduced (from 600,000 tons/month as specified under contract to 100,000 tons/month) because the coal created excessive slagging and fouling problems when burned in boilers, the utilities turned to the eastern Powder River Basin to make up the difference in shipments. A suit filed by Houston Lighting and Power and Utility Fuels, Inc. against Spring Creek Coal Co. and NERCO, Inc. (subsidiaries of Pacific Power and Light Company) to amend their coal supply contract was dismissed in late July after an interim agreement between the parties was reached. NERCO is now obtaining coal from the Carter Mining Company's Caballo Mine south of Gillette and from Kerr-McGee Coal Corp. to supply the two Texas utilities. The 52 cubic yard dragline at Spring Creek was mothballed for one year starting in late August, 1982, and other equipment was to be moved from Spring Creek to the Antelope Mine in Converse County, Wyoming.

OIL AND GAS

by Alan J. Ver Ploeg, Staff Petroleum Geologist, Geological Survey of Wyoming

The big news in the petroleum industry in Wyoming continues to be the downswing in activity. The active rig count for August 30th is 112, while in 1981 on August 31st the count was 201. This, along with recent refinery closures, has had a definite effect on industry employment in the state and region. Most analysts, however, feel that there will be an upswing in activity within six months to a year.

Recent new discoveries in the Overthrust Belt include a Permian Phosphoria discovery by Amoco Production in Red Canyon Field. The well was completed for 1,009,000 cubic feet of gas and three barrels of condensate per day. The field already produces gas from the Pennsylvanian Weber Sandstone. In addition, Natural Gas Corporation of California completed a Pennsylvanian Amsden discovery 10 miles north-northeast of Kemmerer in Lincoln County. The well was completed for 650,000 cubic feet of gas and three barrels of condensate, and represents the first Amsden production in the Overthrust Belt.

Oxy Petroleum recently completed a prolific oil discovery in Campbell County, 13 miles north-northeast of the town of Gillette. The well produces from Pennsylvanian Minnelusa at the rate of 1,534 barrels per day.

In recent industry-related news, cleanup was completed along Whistle Creek, the Shoshone River and Big Horn Lake on an oil spill which occurred August 1st. Approximately 3,880 barrels of oil spilled from Marathon's pipeline near Byron, Wyoming. The break apparently occurred when the line was pressurized on August 1st. According to Marathon, the line was apparently weakened when a grader struck it some days before the pressure test.

Controversy continues over the proposed Getty exploratory well on Little Granite Creek, southeast of Jackson, Wyoming. Getty proposes to drill on a 9,000-foot saddle between two drainages in an area that many groups want included in the proposed Gros Ventre Wilderness in the Bridger-Teton National Forest. The proposed well is bitterly opposed by several conservation groups and the Wyoming Game and Fish Department, who feel the road into the site would harm wildlife habitat in the area and pollute mountain streams. Getty had been given permission to drill by federal agencies but has not been given permission to drill by the Wyoming Oil and Gas Conservation Commission. The Commission presently has a protest to Getty's road construction before it. Although this protest was initially filed by the Wyoming Game and Fish Department, several citizen groups have since intervened. The hearings on this matter were recently continued because the commission decided that both Getty and the federal agencies had refused to provide needed information.

Getty estimates that the Little Granite Creek area may contain as much as 300 billion cubic feet of recoverable natural gas.

Fall Agricultural Outlook

by Robert D. Carver
University of Wyoming

It is difficult to build very much optimism into the agricultural price outlook as we move into the fall of 1982. An analysis of most of the commodities marketed by Wyoming agricultural producers projects record supplies in the grains area and livestock prices below breakeven levels.

GRAIN AND FEED SITUATION

Although Wyoming's wheat production is 19 percent below 1981, the 1982/83 U.S. wheat marketing year will be facing record supplies and continued relatively low prices. A near record 1982 U.S. crop, combined with the largest carry-over in four years, will push 1982/83 supplies to a new record--only 130 million bushels short of 4 billion.

World wheat output for 1982 is projected to be 2 percent below last year's record harvest. It appears the USSR's production will not match last year, which was one of three successive poor crops. Crop estimates for Australia, China and India are also expected to be smaller.

Given the overall world supply outlook however, farm prices in the U.S. likely will average only marginally above last year's level through the fall, with possible price increases later in the marketing year.

USDA's forecast of 1982 corn production is a record high 8.32 billion bushels, 1 percent over the previous record set in 1981. The projected large feed grain harvest and prospects for a substantial increase in ending stocks will put pressure on feed grain prices throughout 1982/83.

USDA's forecast of hay production in 1982 is at a record level, 6 percent over 1981 and 3 percent higher than the previous record in 1979. For the most part, grass and forage supplies in Wyoming are good to excellent.

LIVESTOCK

The U.S. Department of Agriculture's mid-year cattle inventory estimate indicated the nation's cattle producers have begun to trim the size of their herds this past year. This development was largely unexpected and as such brightens market prospects for the next couple of years.

The report estimated the number of cattle and calves on U.S. farms and ranches on July 1 at 123.7 million head, down 1 percent from a year earlier. This indicates some decline in inventory after only two years of expansion from the low point in the cattle production cycle. Particularly surprising was the estimated 4 percent decline in beef cow numbers. Inventory estimates on January 1 had shown 2 percent more beef cows on hand than a year earlier and 8 percent more heifers for beef herd replacements.

The preliminary estimate of the 1982 calf crop showed a 3 percent reduction from 1981. Steers weighing more than 500 pounds were estimated to be up 1 percent and the number of cattle less than 500 pounds were reported at the same level as a year earlier.

If the trends indicated in the mid-year report prove to be correct, the liquidation phase of the current cattle cycle has begun after an unprecedented short expansion phase.

The nation's cattle feeders have continued to be willing marketers of cattle, keeping weights down and heading off possible backlogs at the feedlot level. Good demand for feeder cattle, combined with a reduced supply, has resulted in some strength in yearling steer prices over the past several weeks. In most parts of the country, yearling cattle were trading at a premium to fed cattle in early September.

PROSPECTS

Fed cattle prices are expected to weaken into the October-November period before strengthening somewhat in December. Prospects look favorable for fed cattle to reach or exceed \$70 per cwt sometime later this year.

With the excellent forage conditions throughout most of the country, feeder cattle are in fairly firm hands. With stronger fed cattle prices anticipated relative to a year ago, feeder cattle are expected to trade steady to stronger than year ago levels throughout the normal large fall seasonal movement. Steer calf prices in Wyoming should be in the \$72-\$76 per cwt range for 4-500 weights, with heifers \$6-8 per cwt under steers. Yearling cattle should hold \$6-\$8 per cwt below calves as long as feed prices remain cheap.

An important factor in the grains area to watch closely is the value of the dollar in world trade. The recent (early September) increase in the price of gold relative to the dollar will increase export demand for U.S. grains. If this trend continues, we could see sharp increases in domestic grain prices despite record U.S. supplies.

Figure 1: Energy and Mineral Production
(10's)

8

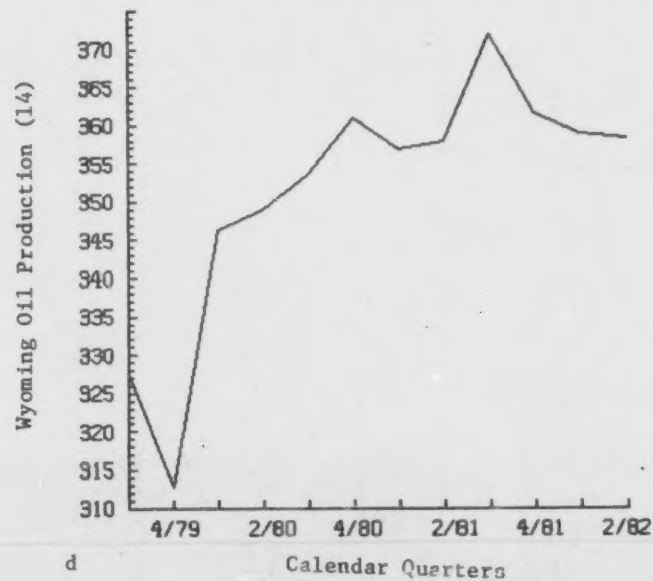
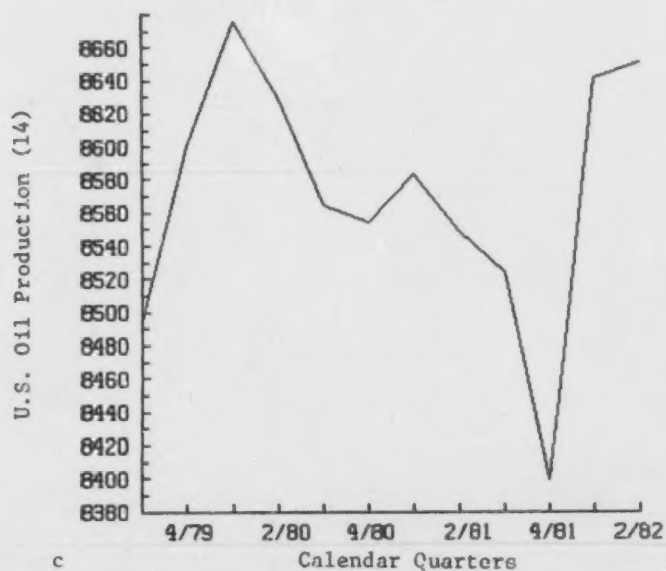
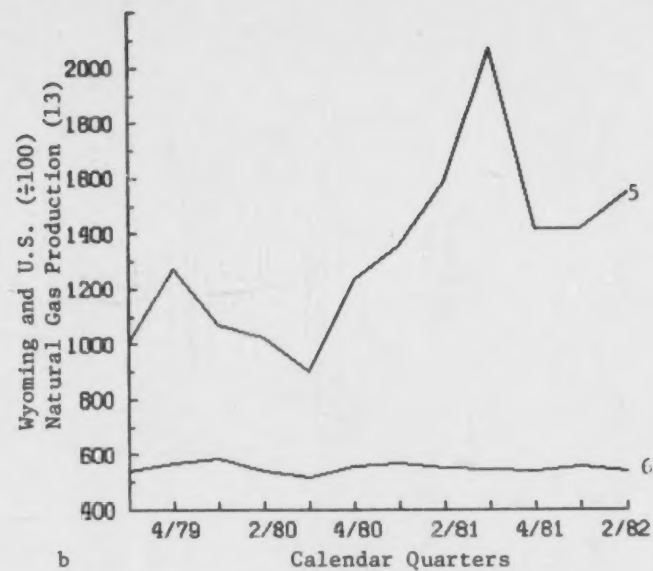
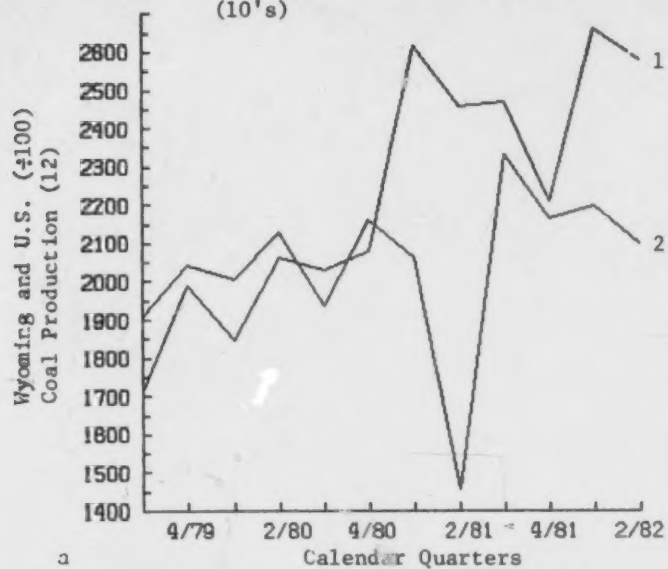


Table 1: Energy and Mineral Production¹

Calendar Quarters	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82
1. Wyoming Coal (12)	17119.	19897.	18487.	20630.	20297.	20799.	26148.	24574.	24715.	22109.	26586.	25809.
2. U.S. Coal (12)	190780.	204300.	200763.	212651. ²	193760.	216015.	206426.	145696.	233050.	216580.	219743.	209771.
3. Wyoming Oil (14)	328.	313.	346.	349. ²	354.	361.	357.	358.	372.	362.	359.	358.
4. U.S. Oil (14)	8495.	8600.	8676.	8629. ²	8565.	8554.	8583.	8548.	8524.	8400.	8642.	8650. ³
5. Wyoming Natural Gas (13)	1006.	1273.	1071.	1028.	901.	1232.	1358.	1589.	2073.	1421.	1418.	1550. ³
6. U.S. Natural Gas (13)	54114.	57087.	58381.	54300.	51777.	55776.	56830.	54977.	54880.	54298.	55737.	54000. ³

Although somewhat buffered by long-term contracts, Wyoming's mining industry is not fully insulated from the nationwide recession. Wyoming's 2/82 coal output is off 2.9 percent from 1/82 production levels, but up 5.0 percent compared to revised output data for 2/81. U.S. coal production during 2/82 was also less (-4.5%) than output during 1/82.

Wyoming's oil production during 2/82 was unchanged from a year ago, and only one barrel per day below the rate in 1/82. U.S. oil production was up slightly (1.2%) in 2/82 over 2/81. However, the combined effects of the recession, high interest rates and increased conservation are reducing exploration for new supplies. High interest rates are a factor because most drilling activity is financed with borrowed money. The cutback in exploration will be reflected in future production statistics.

Natural gas production estimates for 1/82 were off by only 0.5 percent for the U.S., but exceeded Wyoming's actual 1/82 output by 8.2 percent. This quarter's (2/82) estimates indicate a 9.3 percent increase in Wyoming's output, and a 3.1 percent decrease in U.S. natural gas production. Production from the Riley Ridge field near Big Piney is expected to eventually increase Wyoming's gas output substantially. This field, with estimated reserves in excess of all Overthrust Belt reserves combined, was discovered in the early 1960s. However, the depth of the gas and its high CO₂ content made it uneconomical to produce until prices rose to current levels.

¹First-time readers of WOU should refer to the "Format" page for an explanation of numerical codes and table formats.

²Datum shown is an estimate. Some data components are unavailable.

³Estimate based on April data and trend.

Figure 2: Agriculture
(10's)

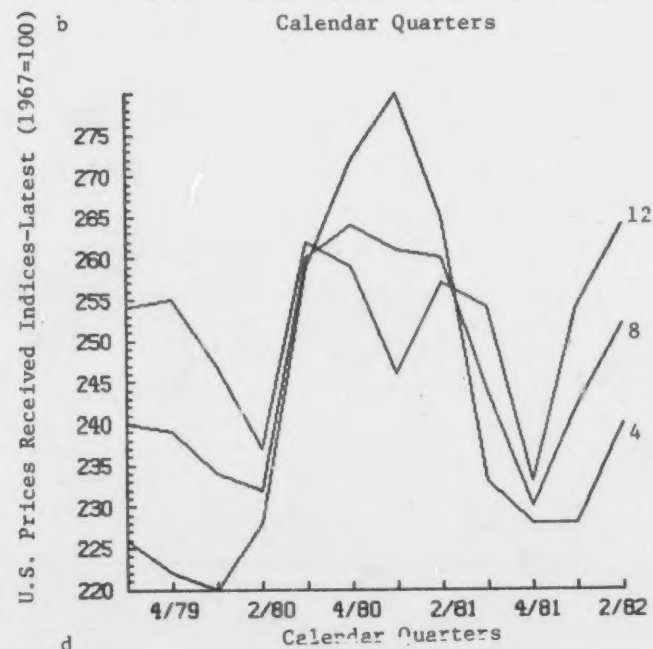
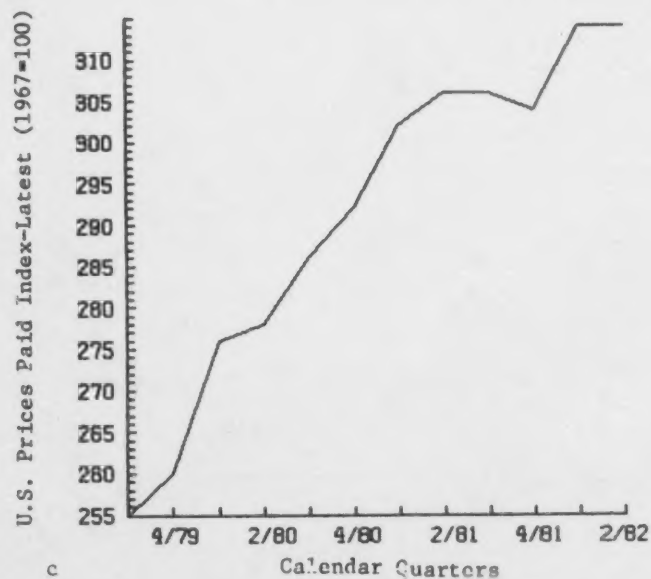
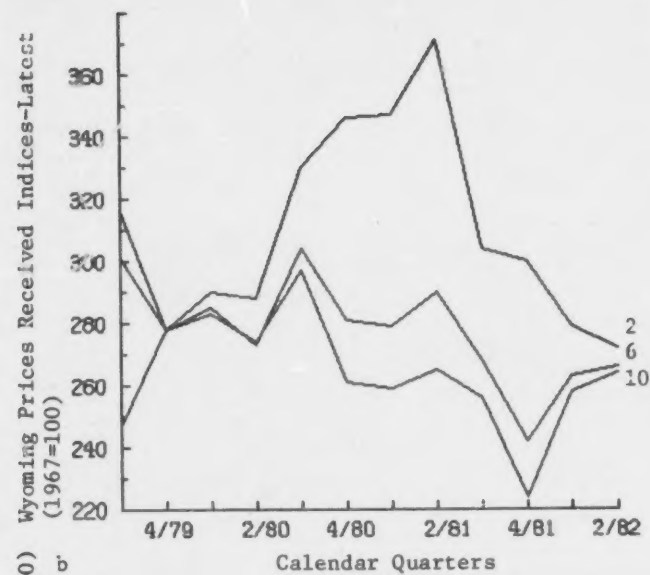
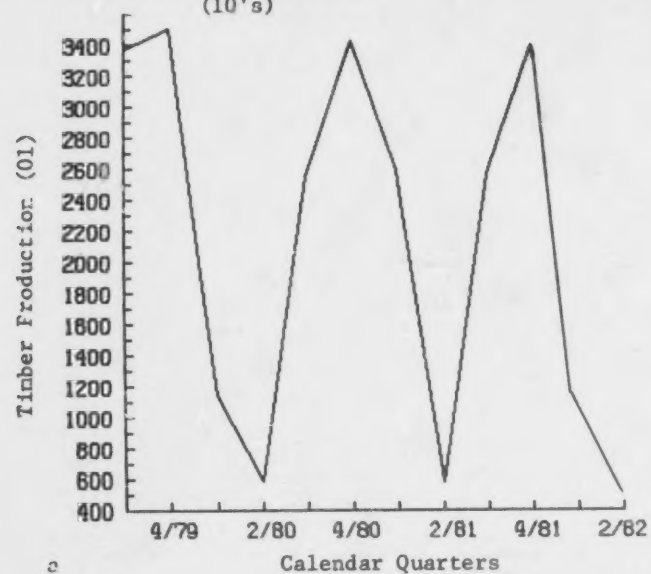


Table 2: Agriculture

Calendar Quarters	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82
1. Timber Cut in Wyoming National Forests (01)	33745.	35043.	11372.	5866.	25538.	34190.	25895.	5810.	25613.	33929.	11658.	4285.
Price Indices ¹ (1967=100)												
2. Wyoming Crops, Prices Received - Latest	247.	278.	290.	288.	330.	346.	347.	371.	304.	300.	279.	272.
3. Wyoming Crops, Prices Received - Average	246.	259.	279.	282.	308.	316.	350.	347.	302.	300.	283.	273.
4. U.S. Crops, Prices Received-Latest	226.	222.	220.	228.	259.	272.	280.	265.	233.	228.	228.	240.
5. U.S. Crops, Prices Received-Average	233.	224.	221.	223.	251.	267.	278.	271.	249.	245.	234.	238.
6. Wyoming All Commodities, Prices Received-Latest	301.	278.	285.	273.	304.	281.	279.	290.	268.	242.	263.	266.
7. Wyoming All Commodities, Prices Received-Average	284.	281.	281.	273.	285.	281.	277.	284.	265.	250.	248.	266.
8. U.S. All Commodities, Prices Received-Latest	240.	239.	234.	232.	260.	264.	261.	260.	244.	230.	242.	252.
9. U.S. All Commodities, Prices Received-Average	241.	238.	237.	229.	255.	263.	263.	260.	251.	234.	241.	250.
10. Wyoming Livestock, Prices Received-Latest	316.	278.	283.	274.	297.	261.	259.	265.	256.	224.	258.	264.
11. Wyoming Livestock, Prices Received-Average	295.	288.	282.	272.	282.	274.	255.	266.	254.	235.	238.	264.
12. U.S. Livestock, Prices Received-Latest	254.	255.	247.	237.	262.	259.	246.	257.	254.	233.	254.	264.
13. U.S. Livestock, Prices Received-Average	248.	251.	251.	234.	259.	261.	250.	251.	254.	240.	247.	262.
14. Prices Paid by U.S. Farmers-Latest	255.	260.	276.	278.	286.	292.	302.	306.	306.	304.	314.	314.
15. Prices Paid by U.S. Farmers-Average	253.	258.	273.	276.	284.	291.	300.	305.	306.	305.	313.	314.

Timber production (Graph A) evidenced its expected second quarter lapse in 1982. The 4,285 MBF volumes recorded for 2/82 also represents, however, the third consecutive second quarter with a decline in production. Recall that in 2/79 11,712 MBF volumes of convertible timber products were harvested. In the past three years, then, second quarter production has decreased 63.41 percent. More recent comparisons of second quarter harvestings are not quite as pronounced: 2/82 production was down 26.25 percent from 2/81 and down 26.95 percent from 2/80. Demand for wood products is determined principally by housing sales, which are currently well below historical sales records.

Prices received by farmers and ranchers in Wyoming and nationwide remained unusually constant throughout 2/82, as is indicated by the very slight differences between the latest prices received and the average of the prices received for the quarter. Perhaps this is a sign of stabilization. Another promising point is that all indices except the index of prices received for crops in Wyoming either increased or remained unchanged in 2/82 over 1/82. Probably the best news of all is the stabilization, at least for the time being, in agricultural costs. The June prices paid index was the same as in March.

¹The index for the last month (latest) of each quarter, along with the average of the three monthly indices of each quarter.

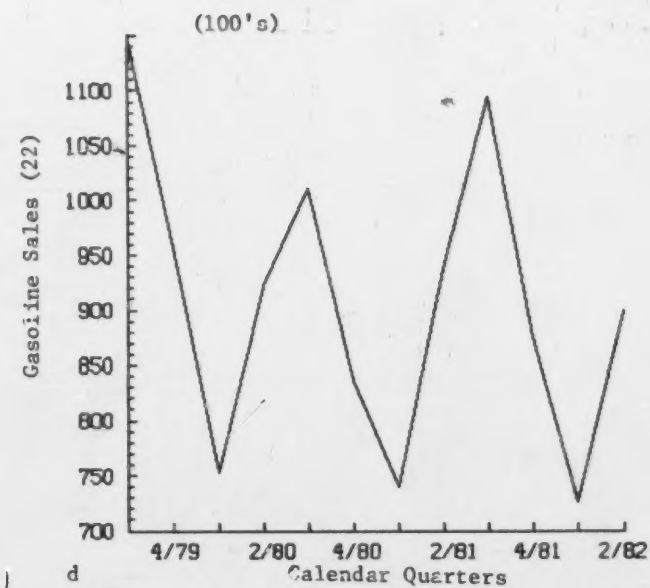
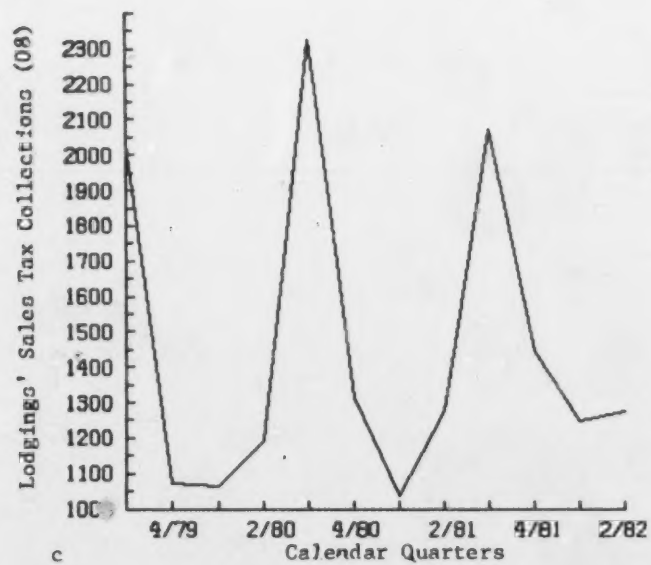
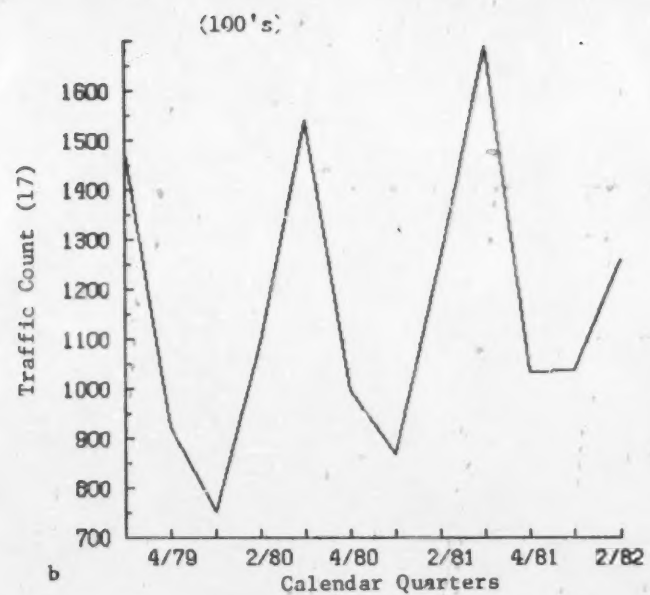
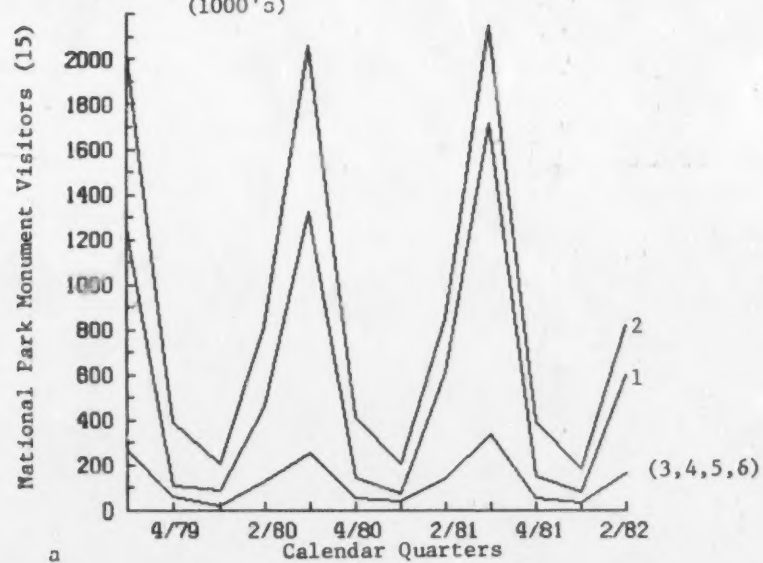
Figure 3: Tourism
(1000's)

Table 3: Tourism

Calendar Quarters	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82
<u>National Parks and Monuments</u>												
1. Yellowstone (15)	1251088.	112061.	89609.	459974.	1323837.	144039.	74693.	609642.	1715175.	149682.	82758.	600071.
2. Grand Teton (15)	2023084.	389457.	205415.	814813.	2055989.	412817.	206147.	847464.	2147775.	393843.	185935.	820236.
3. Devil's Tower (15)	140701.	12606.	7600.	51992.	144042.	12346.	13425.	63064.	205660.	18159.	9425.	86305.
4. Fossil Butte (15)	8984.	1404.	91.	2864.	6857.	1421.	339.	3795.	7769.	1018.	596.	6691.
5. Fort Laramie (15)	64685.	7236.	3630.	27621.	52608.	6337.	6309.	40192.	64598.	10190.	5037.	31447.
6. Bighorn NRA-South (15)	54125.	37334.	10564.	45481.	49499.	35422.	18509.	34846.	56566.	27820.	17701.	42059.
<u>Other Tourism Indicators</u>												
7. Traffic Count (17)	147903.	92168.	75203.	109530.	154224.	99772.	86957.	125992.	169095.	103438.	103864.	126037.
8. Hotel, Motel, and Camp Sales Tax (08)	2031.	1074.	1064.	1189.	2326.	1315.	1036.	1272.	2073.	1447.	1247.	1273.
9. Gasoline Sales (22)	114513.	95742.	75338.	92212.	101005.	83626.	74027.	93721.	109335.	87500.	72548.	90000. ²

Despite an end to falling gasoline prices and the apparent low point of a nationwide recession, tourism in Wyoming does not appear to be off significantly from the second quarter of last year. Yellowstone visits during 2/82 are off only 1.6 percent from 2/81, and Grand Teton visits are off only 3.2 percent. Both results are more likely due to poor weather than adverse economic conditions. Visitation at Devil's Tower and Fossil Butte during 2/82 was actually up 36.9 and 76.3 percent, respectively, over 2/81 visitation. Those figures support the assertions by Randy Wagner of the Travel Commission that, "Most people regard a vacation as a necessity and plan it in their annual budgets," and "The tourism industry (in Wyoming) has shown itself to be fairly recession-proof."

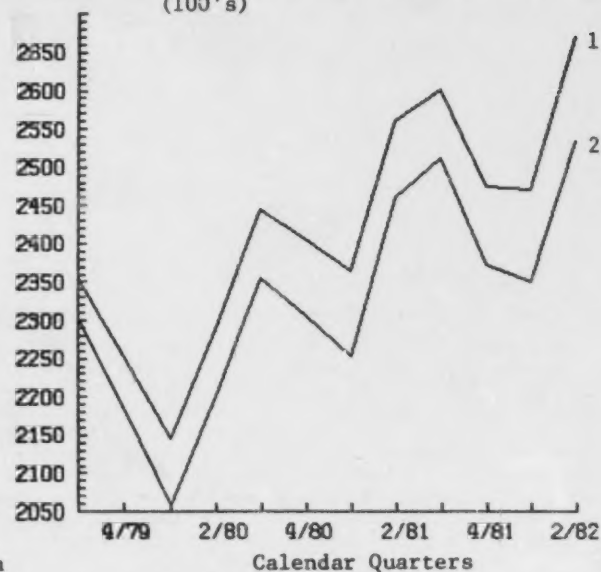
The other tourism indicators also show little change between 2/82 and 2/81. The 1/82 estimate of gasoline sales shown in the summer WOU was off by only 1.2 percent from the actual number shown above. Considering the importance of tourism to Wyoming's economy, it would certainly be very good news if 1982 trends continued to approximate the near-record levels of tourism recorded in 1981. It remains to be seen how tight-fisted Wyoming's visitors will be. Early indications are that visitors are being more cautious in making nonessential purchases. Third quarter data should provide most of the answers.

¹Big Horn Canyon N.R.A. is only partially in Wyoming. Only visitation data for the Wyoming part is shown.

²Estimated from trend and April data.

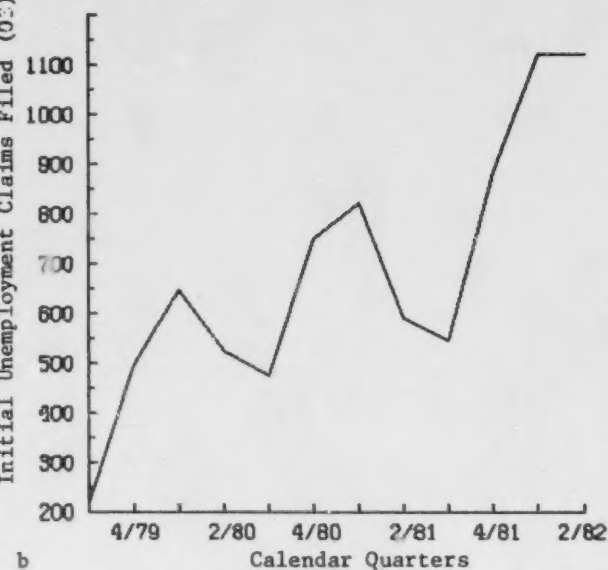
Figure 4: Employment and Labor
(100's)

Civilian Labor Force and Employment (03)



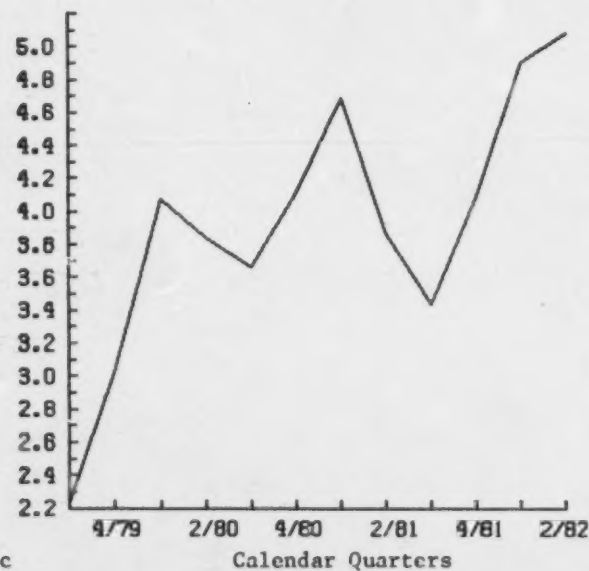
a

Initial Unemployment Claims Filed (02)



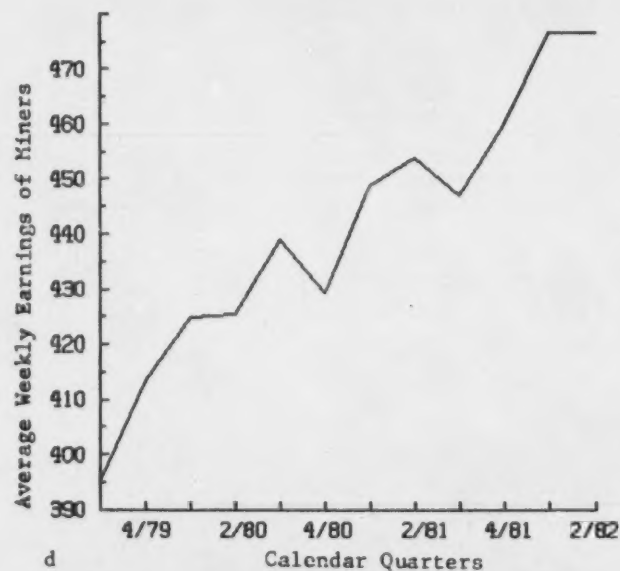
b

Unemployment Rate (02)



c

Average Weekly Earnings of Miners



d

Table 4: Employment and Labor¹

Calendar Quarters	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82
1. Civilian Labor Force (03)	235587.	225379.	214579.	228869.	244355.	240566.	236480.	255956.	260041.	247523.	247185.	266919.
2. Employment (03)	230334.	218571.	205831.	220080.	235404.	230685.	225414.	246075.	251110.	237402.	235065.	253371.
3. Unemployment (03)	5253.	6809.	8748.	8789.	8951.	9881.	11066.	9881.	8931.	10121.	12119.	13548.
4. Unemployment Rate (02)	2.2	3.0	4.1	3.8	3.7	4.1	4.7	3.9	3.4	4.1	4.9	5.1
5. Initial Claims Filed (03)	2200.	4977.2	6466.	5242.	4745.	7494.	8231.	5901.	5463.	8837.3	11237.	11225.
6. Applications Received (03)	10667.	8300.2	10263.	12481.	12727.	9584.	13026.	13522.	13884.	10000.3	12070.	14838.
7. New Non-Agricultural Openings (03)	13513.	9000.2	7126.	9217.	11068.	7526.	6912.	9903.	12991.	6300.3	6119.	8344.
8. New Non-Agricultural Placements (03)	10655.	8100.2	6211.	7848.	9218.	6482.	5649.	7681.	10072.	5850.3	5138.	7161.
9. Miner's Average Weekly Hours	43.4	43.7	42.7	42.9	44.1	43.3	43.8	42.8	41.5	42.5	42.0	41.7
10. Miner's Average Weekly Earnings (05)	395.23	413.16	424.77	425.31	438.97	429.26	448.66	453.75	44.13	459.64	476.53	480.37
11. Miner's Average Hourly Wage (05)	9.10	9.45	9.94	9.91	9.95	9.91	10.24	10.61	10.78	10.81	11.34	11.52

This quarter, the positive effect of summer hires, a usual occurrence in healthy times, did not offset growth in the labor force due to students seeking summer employment. On a national level, headlines reported that the unemployment rate hit a 41-year high during 2/82. Here in Wyoming, the unemployment rate rose to 5.1 percent, standing 4.08 percent (not percentage point) above 1/82 and a remarkable 30.77 percent (not percentage point) above 2/81. Looking at the number of unemployed in the state during 2/82, figures show an 11.79 percent increase over 1/82; last year, unemployment decreased by nearly the same percentage--10.70--percent during the same period. The Employment Security Commission attributes this unseasonal rise in unemployment to numerous job layoffs throughout the state.

Despite the high level of unemployment, employment and the civilian labor force grew in line with seasonal expectations during 2/82. Over the quarter, employment jumped 7.79 percent over 1/82, a percentage only slightly below the 9.17 percent increase in employment reported last year during the same period. At 266,919, the civilian labor force increased 7.98 percent over 1/82, compared to the 8.23 percent increase which occurred one year ago. Joblessness during 2/82 also was not reflected in the number of unemployment claims filed. While the number of claims has drastically increased within the past year, 2/82 marked a period with a 0.11 percent decrease in claims.

Weekly earnings for miners were up, despite a cut in hours worked for the second consecutive quarter. Again, this is due to an increase in the hourly rate received, which in 2/82 was 1.59 percent above the rate paid in 1/82.

¹The most recent year's data are preliminary.

²Estimated. October 1979 data are not available.

³Estimated. October and November 1981 data are not available.

Figure 5: Business Conditions

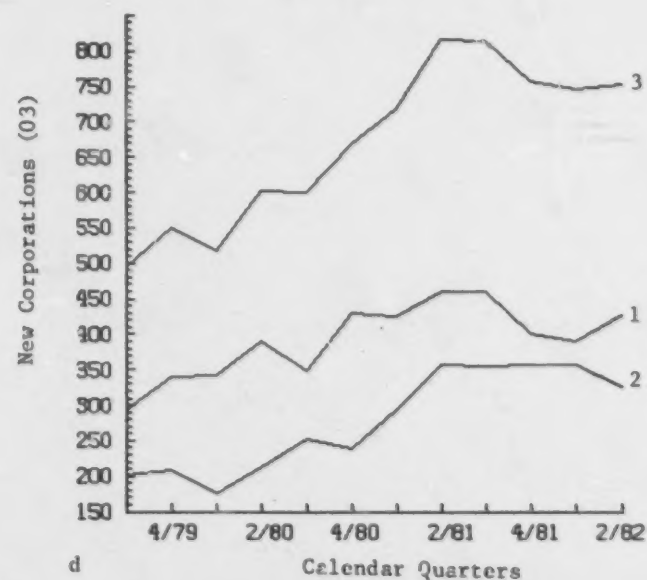
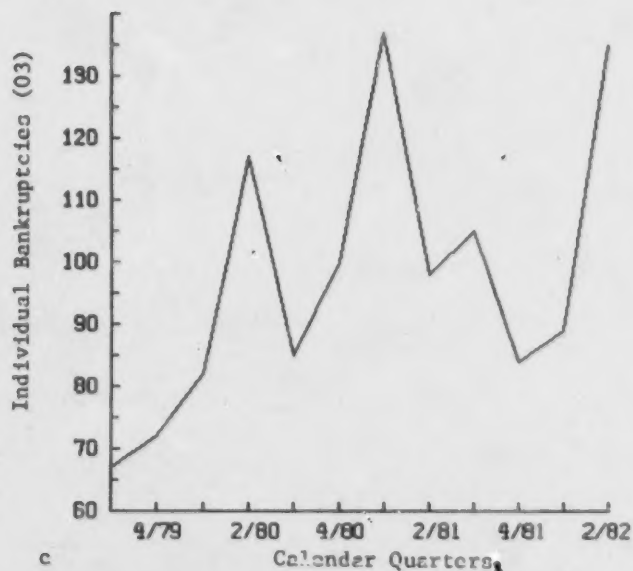
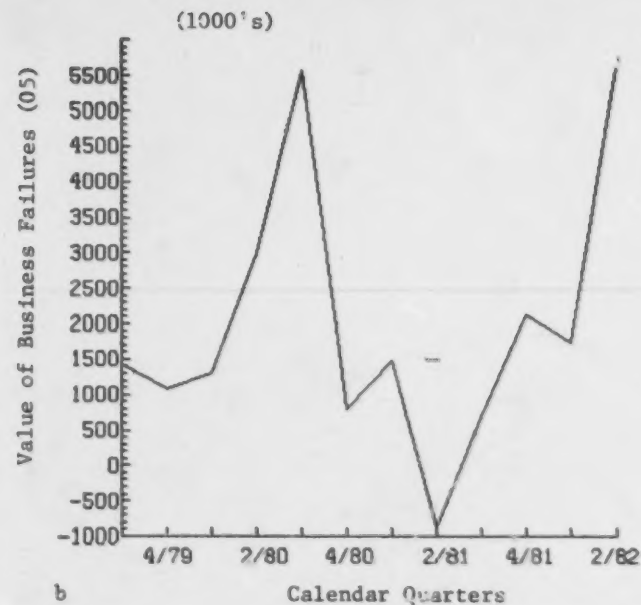
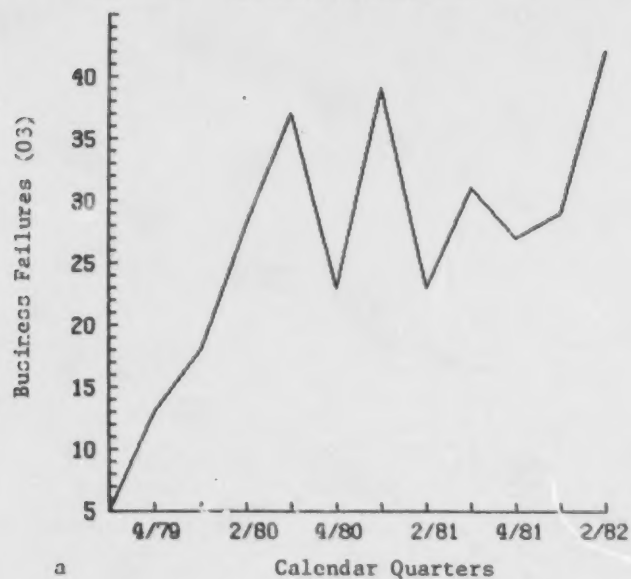


Table 5: Business Conditions

Calendar Quarters	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82
1. New Domestic Corporations (03)	294.	340.	342.	391.	348.	429.	424.	459.	459.	400.	389.	428.
2. New Foreign Corporations (03)	201.	209.	175.	212.	252.	239.	294.	357.	356.	358.	357.	326.
3. Total New Corporations (03)	495.	549.	517.	603.	600.	668.	718.	816.	815.	758.	746.	754.
4. Business Failures (03)	5.	13.	18.	28.	37.	23.	39.	23.	31.	27.	29.	42.
5. Value of Business Failures (05)	1429461.	1079393.	1307881.	2985150.	5565342.	799288.	1474498.	-858446. ¹	679652.	2140230.	1743196.	575821.
6. Personal Bankruptcies (03)	67.	72.	82.	117.	85.	100.	137.	98.	105.	84.	89.	135.

Business failure and bankruptcy data for Wyoming for the first time appear to match the comparable nationwide data in magnitude as well as direction. According to the Dun and Bradstreet credit-rating service, the 10,978 business failures recorded nationwide during the first 5½ months of 1982 were the most for any comparable period since the Great Depression of the 1930s. Business failures recorded for the state during 2/82 were up 44.8 percent over the previous quarter, and up 82.6 percent from failures in 2/81. The tremendous 230.4 percent jump in the 2/82 value of business failures over 1/82 was attributable largely to the failure of a single agricultural partnership. The liabilities of the two partners exceeded assets by over \$3 million, accounting for over three-fourths of the increase in 2/82 over 1/82. Bankruptcies were also up substantially in 2/82, 51.7 percent more than during 1/82 and 37.8 percent over the same quarter a year ago.

Despite the economic problems behind the increase in failures and bankruptcies, 428 new domestic corporations registered with the Secretary of State during 2/82, a 10.0 percent increase over 1/82. Compared to 1/82 and 2/81, registration of new foreign corporations fell 8.7 percent during 2/82.

Of relevance to Wyoming business conditions are several recent decisions by the U.S. Supreme Court. The court gave Congress until October 4 to revise the 4-year-old bankruptcy court system. In another action, the court ruled that federal savings and loan institutions can prevent homebuyers from assuming existing mortgages. Loss of some low-interest financing would hurt real estate buyers, sellers, and agents, while helping the savings and loan institutions.

¹Assets exceed liabilities.

Figure 6: Construction

(10,000's)

18

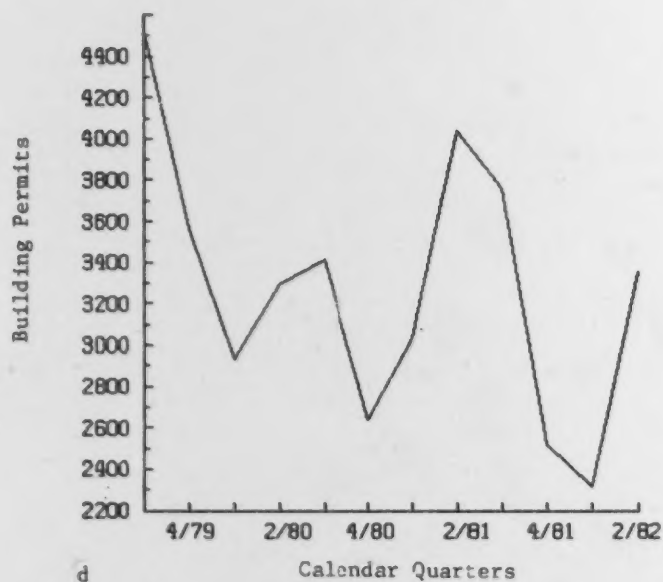
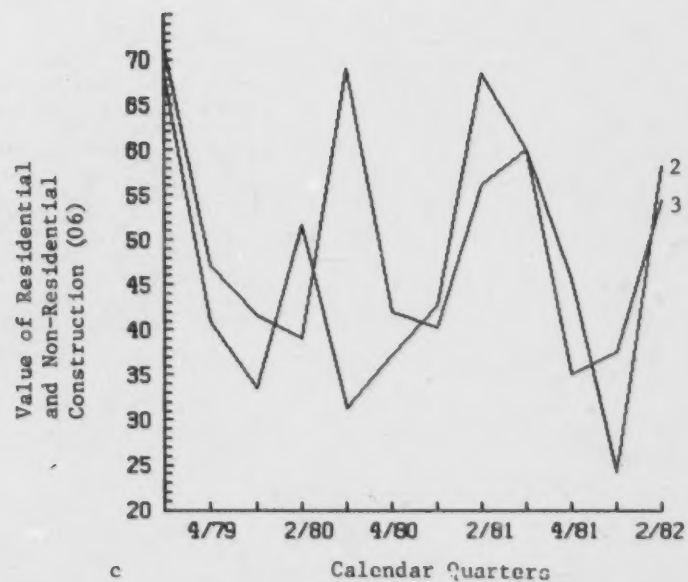
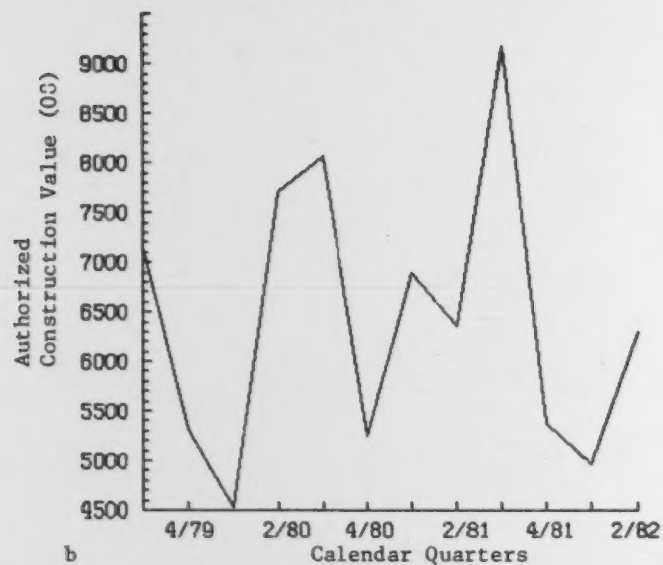
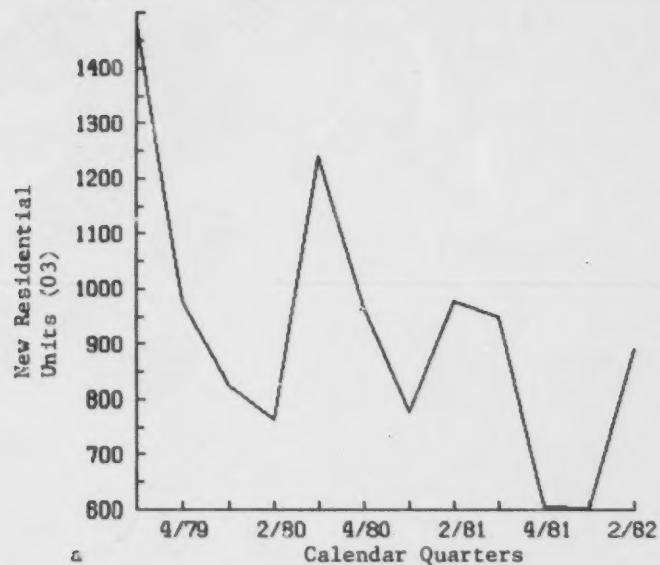


Table 6: Construction¹
Calendar Quarters

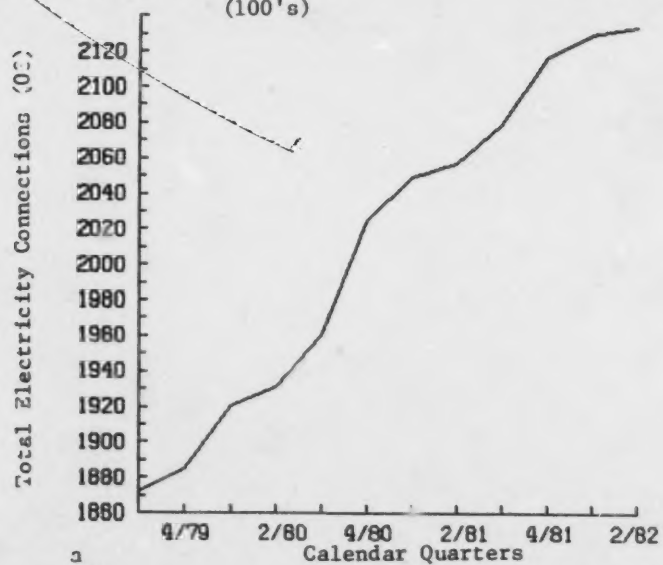
	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82
1. New Residential Dwelling Units (03)	1481.	976.	824.	762.	1240.	965.	777.	978.	948.	605.	604.	891.
2. Value of Residential Dwellings Constructed (06)	71.6	47.1	41.6	39.0	69.0	42.0	40.2	56.1	60.0	35.1	37.4	54.3
3. Value of Nonresidential Construction (06)	68.3	40.9	33.6	51.5	31.2	37.2	42.6	68.5	60.1	45.6	24.3	58.1
4. Building Permits Issued in Selected Wyoming Cities (03)	4515.	3560.	2934.	3293.	3414.	2637.	3027.	4040.	3755.	2516.	2317.	3355.
5. Value of Authorized Construction (08)	71643.	53215.	45371.	77045.	80648.	52550.	68995.	63557.	91789.	53839.	49768.	62935.

The usual second quarter upswing in construction activity is reflected in the data above. However, each of the five 2/82 indicators is below its 2/81 level. On a brighter note, all five indicators grew more rapidly from 1/82 to 2/82 than they did from 1/81 to 2/81. Respectively, the five indicators increased 47.5, 45.2, 139.1, 44.8, and 26.5 percent from 1/82 to 2/82, and 25.9, 39.6, 60.8, 33.5, and -7.9 percent from 1/81 to 2/81.

Nationwide, new housing starts are at a 911,000 rate this year, the worst year since 1946. However, one bank recently lowered its mortgage rate from 16 to 11.9 percent, reportedly in response to the passage of the Reagan-supported \$99 billion tax bill. Hopefully, other banks will follow. In the meantime, apartment building construction activity was given a shot in the arm by a federal subsidy program. That caused housing starts to jump 33.7 percent in July, compared to June. The surge will be temporary unless the new trend toward lower interest rates is sustained and thus reflected in long-term mortgage interest rates.

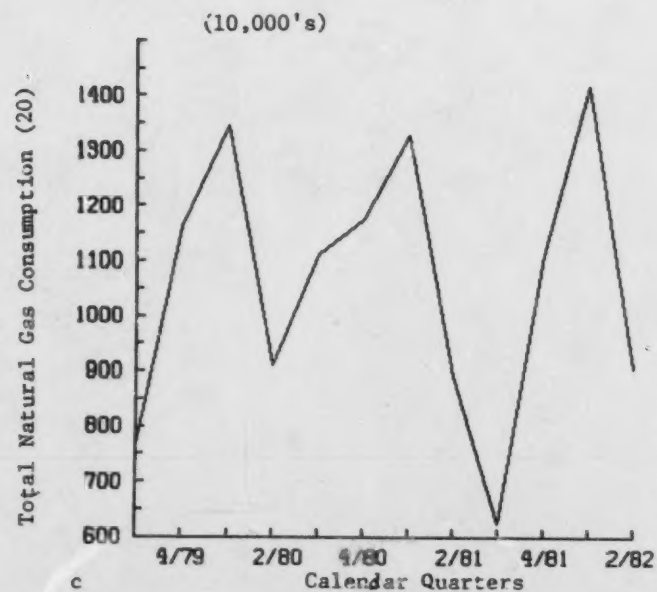
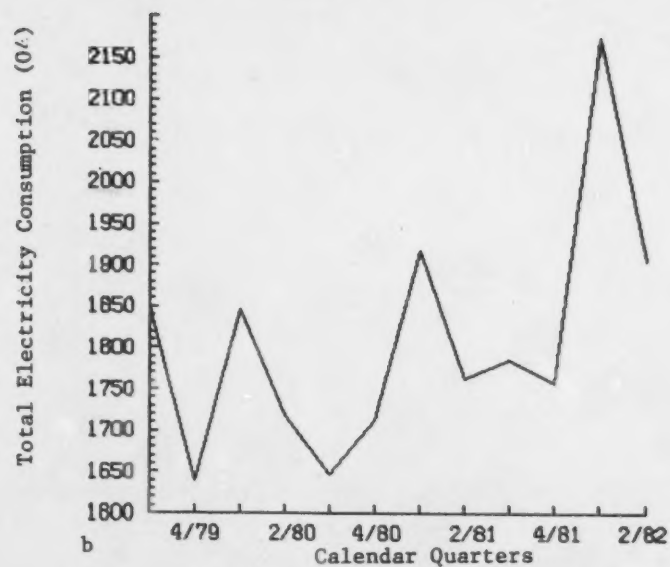
¹Numbers appearing in this table may differ slightly from source data due to summing of rounded data.

Figure 7: Utilities
(100's)



(1000's)

20



(10's)

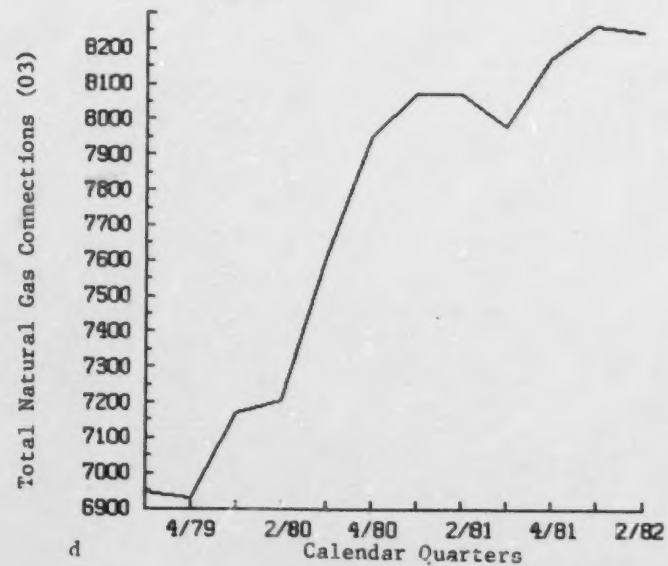


Table 7: Utilities¹

Calendar Quarters	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82
1. Residential Electric Connections (03)	152198.	154682.	157183.	158424.	160950.	166342.	168477.	169494.	169777.	174369.	174018.	174126.
2. Residential Electric Consumption (04)	243384.	335770.	430258.	319866.	264960.	335159.	487386.	331256.	282226.	218361.	504636.	375401.
3. Commercial Electric Connections (03)	26762.	27071.	27208.	27772.	28072.	28847.	29465.	29605.	30522.	30047.	30833.	31086.
4. Commercial Electric Consumption (04)	273717.	265711.	282677.	267804.	287954.	271561.	298580.	288617.	317998.	303091.	354594.	319879.
5. Industrial Electric Connections (03)	3352.	2891.	2891.	2957.	3057.	3312.	3377.	3384.	3484.	3590.	3581.	3451.
6. Industrial Electric Consumption (04)	1254562.	986892.	1092324.	1096646.	1013672.	1049382.	1100964.	1097628.	1112398.	1156967.	1266782.	1179112.
7. Other Connections ² (03)	4890.	3794.	4743.	3986.	3875.	3946.	3579.	3266.	4102.	3652.	4520.	4778.
8. Other Consumption (04)	78105.	51980.	40623.	34114.	80540.	55639.	30333.	45006.	72994.	79409.	48237.	31570.
9. Residential Natural Gas Connections (03)	62977.	62977.	65346.	65731.	69297.	72468.	73699.	73712.	72966.	74828.	75677.	75413.
10. Residential Natural Gas Consumption (04)	851109.	2556825.	4236345.	2311300.	787701.	2770400.	3923502.	2180779.	814900.	2499236.	4607468.	2504865.
11. Commercial Natural Gas Connections (03)	6161.	5997.	6095.	6026.	6360.	6561.	6595.	6557.	6385.	6393.	6482.	6552.
12. Commercial Natural Gas Consumption (04)	367443.	11232437.	1872572.	976489.	347976.	1125956.	1766515.	970295.	382137.	943319.	1955899.	1075767.
13. Industrial Natural Gas Connections (03)	99.	87.	87.	97.	91.	93.	92.	94.	90.	89.	89.	90.
14. Industrial Natural Gas Consumption (04)	6322784.	7734080.	6428686.	5564123.	9887644.	7647357.	7345317.	5607535.	4959825.	7479593.	7328389.	5335475.
15. Other Natural Gas Connections (03)	222.	222.	189.	216.	342.	363.	348.	344.	349.	398.	400.	404.
16. Other Natural Gas Consumption (04)	113356.	209720.	905798.	261674.	98459.	204268.	252249.	147575.	87695.	196349.	299920.	134722.
17. Business Telephone Connections (03)*	40852.	41718.	42307.	43374.	47023.	50115.	45794.	45495.	47932.	47828.	48501.	49003.
18. Private Telephone Connections (03)*	146054.	149103.	151834.	152882.	153475.	156290.	158741.	159456.	160688.	163100.	163790.	162953.
19. Total Telephone Connections (03)*	186906.	190821.	194141.	196256.	200498.	206405.	204535.	204951.	208620.	210928.	212291.	211956.

Electric and natural gas consumption registered its seasonal second quarter decline. The longer days and warm weather of summer pushed residential electric consumption down 25.61 percent under 1/82 use and residential natural gas consumption 45.63 percent below the last quarter. A wetter climate during 2/82 also contributed to a decrease in "other" electric consumption, which accounts primarily for electricity used for irrigation; note that last year during the same period "other" usage increased. These decreases in consumption occurred despite increases in the ever growing number of connections. (A decrease in the number of industrial electric connections and residential gas connections were evident this last quarter, but the percentage of decline in both cases is too slight to speculate on reasons for the change.)

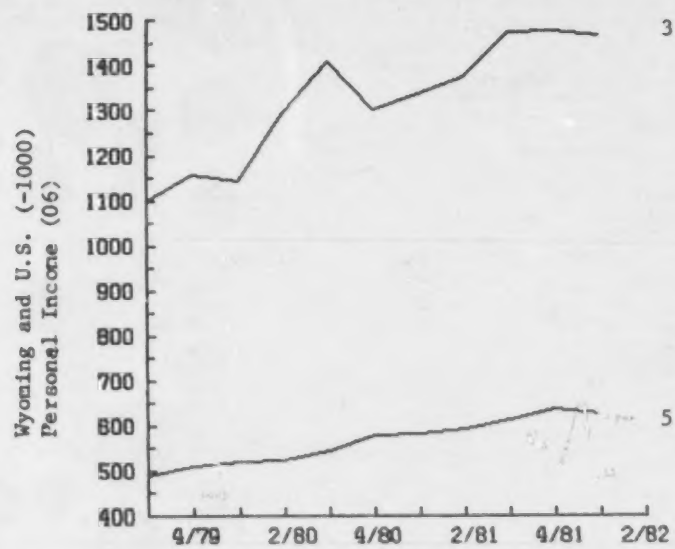
Total telephone connections for 2/82 amounted to 211,956, representing a slight .16 percent decrease below 1/82. The 1.04 percent increase in business telephone connections was not enough to offset the .51 percent decrease in private telephone connections during 2/82.

¹Some small utilities do not report, hence the data are slightly less than actual state totals. Data are consistent. The same utilities reports are included in each figure.

²Other includes Agriculture, Municipal, and Other Public.

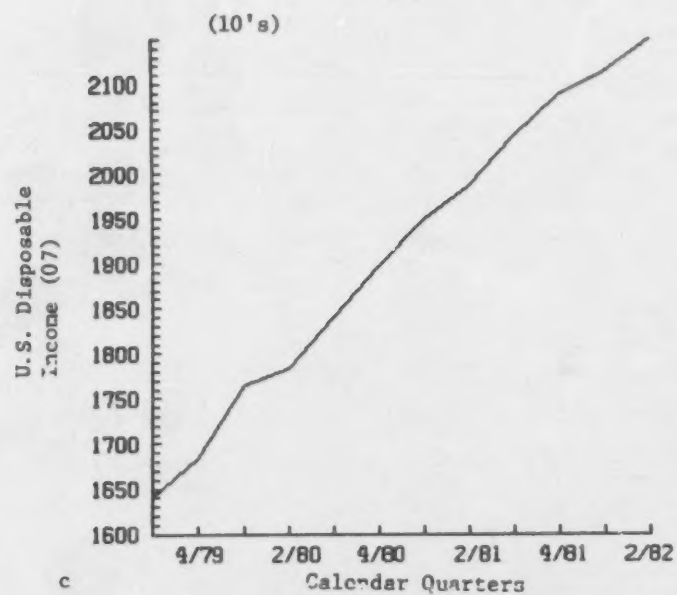
*Over a 4 year period, Mountain Bell reported figures for private telephone connections and business telephone connections contrarily. Figures for 3/79-3/81 have, therefore been corrected since the previous issue of the WQU.

Figure 8: Consumers



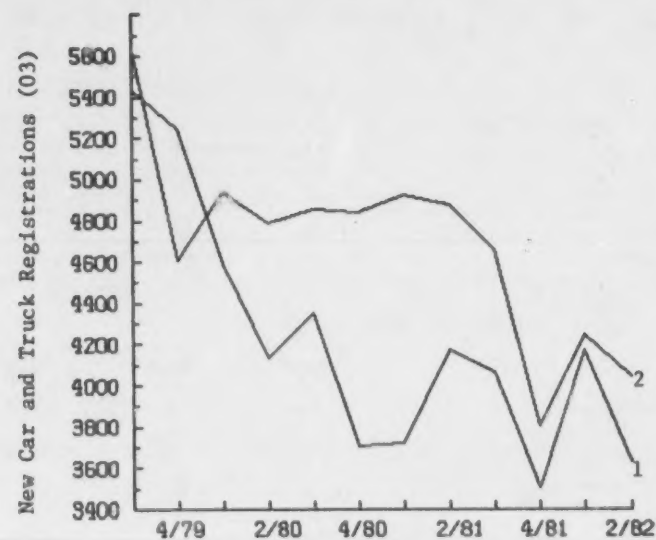
a

Calendar Quarters



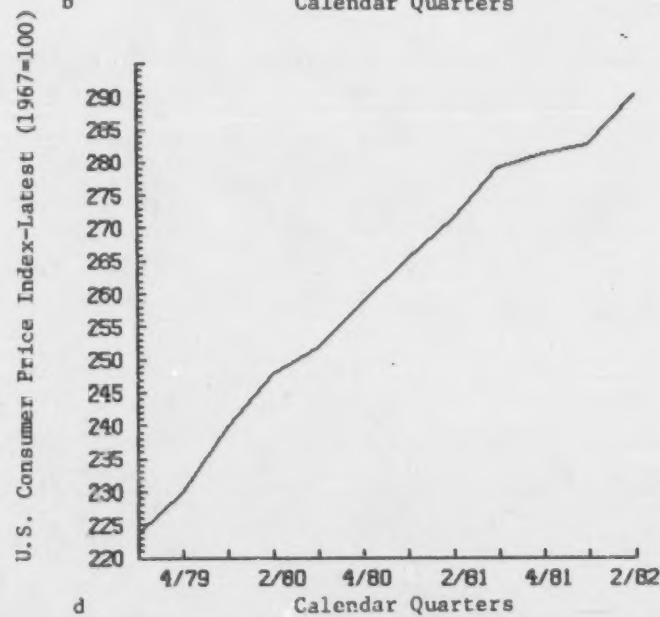
c

Calendar Quarters



b

Calendar Quarters



d

Calendar Quarters

Table 8: Consumers

Calendar Quarters	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82
1. New Truck Registrations (03)	5435.	5248.	4593.	4134.	4353.	3706.	3723.	4175.	4067.	3502.	4176.	3636.
2. New Car Registrations (03)	5628.	4608. ²	4937.	4787.	4859.	4839.	4926.	4879.	4664.	3808.	4249.	4042.
3. Wyoming Personal Income (06)	1098.	1158. ²	1143.	1296.	1409.	1303.	1337.	1375.	1474.	1476.	1468.	INA ¹
4. U.S. Disposable Income (07)	1640.	1683. ²	1765.	1784.	1841.	1897.	1948.	1986.	2042.	2088.	2113.	2150. ¹
5. U.S. Personal Income (06)	488614.	510219. ²	521332.	524735.	543122.	579903.	581161.	594251.	615399.	637178.	625638.	INA
6. Latest U.S. Consumer Price Index (1967=100)	223.7	230.0	239.9	247.8	251.9	258.7	265.2	271.4	279.1	281.1	282.5	290.1
7. Quarter's Average U.S. CPI	221.5	227.7	236.6	245.2	249.8	256.4	263.1	269.1	276.7	280.4	281.9	286.5
8. Wyoming Liquor Sales (08)	6956.	9586.	6410.	7696.	8951.	11280.	6845.	9397.	9396.	11365.	7789.	9057.

New car and truck registrations during 2/82 appear to indicate that the increase recorded in 1/82 was indeed temporary, and, as suggested in the previous WQU, probably due to inducements such as rebates and more comprehensive warranties. New truck registrations during 2/82 were off 12.9 percent from both 2/81 and 1/82 registrations. New car registrations in 2/82 fell 4.9 and 17.2 percent compared to 1/82 and 2/81, respectively.

Estimated 1/82 U.S. and Wyoming personal income presented in the previous WQU differed from the actual data shown above by 0.7 and 0.5 percent, respectively. Both reflected the recession, in that they were below 4/81 levels. No data were available upon which to base estimates of 2/82 personal income. However, based on April and May data, estimated U.S. disposable income in 2/82 was 1.8 and 8.3 percent greater than in 1/82 and 2/81, respectively. The increase was slightly more than the 6.9 percent rate of inflation prevailing in the U.S. from 2/81 to 2/82. The 10.8 percent annual rate of inflation reflected in the increase in the Consumer Price Index from March to June, 1982, is blamed mostly on the abrupt turnaround in energy prices. However, the price hikes are widely believed to be a one-time adjustment, with most analysts forecasting an inflation rate of 6 to 7 percent for the rest of the year and on into 1983.

Liquor sales made their traditional second quarter rebound from a first quarter annual low. However, the 1982 rebound (16.3%) was less than the 1981 bounce-back (37.3%), and 2/82 liquor sales fell 3.6 percent compared to 2/81.

¹Preliminary. An estimate based on trend and first two months of the quarter.

²Estimated. November, 1979 data are missing.

³Seasonally adjusted at annual rates.

⁴Number shown is for the last month of the quarter. CPI shown is the index for clerical workers, not the CPI-U.

Consumers

Wyoming Comparative Cost of Living Index* (July 7-9, 1982): Cheyenne = 100

City	Rank	All Items	Food	Housing	Transportation	Medical
Jackson	1	123.82	105.50	149.06	99.70	105.41
Gillette	2	119.01	106.46	138.51	102.35	108.07
Kemmerer	3	116.19	103.28	133.67	102.07	95.92
Rock Springs	4	113.77	104.47	124.25	105.28	103.34
Casper	5	113.19	105.46	123.23	107.60	104.91
Pinedale	6	112.97	105.67	125.71	100.82	102.79
Evanston	7	111.73	100.22	121.66	101.75	108.11
Riverton	8	111.52	105.58	120.78	105.30	105.50
Sheridan	9	108.75	104.33	114.87	101.15	104.99
Rawlins	10	107.95	100.44	119.78	101.06	94.28
Douglas	11	107.55	102.06	111.67	101.50	113.61
Thermopolis	12	106.73	111.06	109.38	98.28	101.12
Sundance	13	106.32	96.80	116.02	98.18	103.42
Laramie	14	105.93	98.03	113.42	98.19	96.93
Wheatland	15	104.33	102.82	105.81	102.93	97.41
Cody	16	104.20	106.02	108.45	98.03	104.28
Buffalo	17	103.86	103.77	105.15	99.09	106.04
Newcastle	18	103.21	108.20	105.43	95.78	99.06
Cheyenne	19	100.00	100.00	100.00	100.00	100.00
Worland	20	99.89	102.10	98.49	98.66	105.38
Greybull	21	96.28	104.94	87.68	99.24	98.11
Lusk	22	95.30	101.49	86.93	97.85	101.62
Torrington	23	95.19	95.29	92.44	96.56	94.31

Wyoming Comparative Cost of Living Index* (April 7-9, 1982): Cheyenne = 100

City	Rank	All Items	Food	Housing	Transportation	Medical
Jackson	1	132.92	100.67	173.31	101.29	105.31
Casper	2	113.25	104.71	123.65	107.53	111.10
Rock Springs	3	110.46	102.06	119.55	103.60	100.28
Riverton	4	110.36	103.05	119.51	105.38	103.37
Kemmerer	5	110.22	94.01	122.56	102.79	98.07
Gillette	6	110.20	107.17	116.66	104.86	109.33
Evanston	7	109.88	100.10	117.87	103.24	105.21
Sheridan	8	107.79	102.10	114.19	101.17	104.07
Sundance	9	107.23	103.32	114.26	100.12	101.27
Douglas	10	106.63	100.83	108.96	104.08	112.95
Thermopolis	11	106.59	103.99	110.84	103.04	99.66
Newcastle	12	104.22	101.80	109.86	96.07	104.74
Wheatland	13	103.20	105.92	102.20	102.72	97.67
Rawlins	14	102.81	100.86	107.30	101.77	93.77
Worland	15	102.50	101.09	103.45	100.61	104.37
Laramie	16	101.68	97.84	105.34	98.11	95.27
Cody	17	101.68	102.86	101.17	100.53	103.78
Pinedale	18	101.18	99.38	99.42	102.50	102.41
Cheyenne	19	100.00	100.00	100.00	100.00	100.00
Buffalo	20	99.72	104.06	95.55	98.55	106.24
Greybull	21	97.81	102.20	91.75	100.63	99.37
Torrington	22	92.07	92.05	85.44	97.10	103.77
Lusk	23	88.30	97.27	72.96	99.60	101.66

Source: Wyoming Department of Administrative and Fiscal Control

*Apparel and Recreation Indices not shown.

Per Capita Transfer Payments Wyoming Counties and State*

County	1975	1976	1977	1978	1979	1980
Albany	503.79	548.78	604.86	668.82	741.97	894.88
Big Horn	623.24	676.81	743.98	806.61	876.03	1086.13
Campbell	333.44	355.24	537.98	501.84	504.22	480.33
Carbon	512.14	558.03	588.51	633.54	669.71	735.71
Converse	511.75	477.98	517.08	519.84	540.29	625.18
Crook	471.63	538.82	591.70	626.43	729.47	918.11
Fremont	555.77	603.02	635.06	664.82	724.30	818.84
Goshen	681.11	738.93	836.28	934.71	1090.35	1261.92
Hot Springs	930.82	1010.78	1119.18	1267.76	1286.48	1415.96
Johnson	734.39	774.83	842.46	908.75	980.00	1129.85
Laramie	795.71	884.47	972.50	1069.17	1180.58	1353.44
Lincoln	572.63	614.48	643.36	706.99	772.52	891.80
Natrona	546.62	609.77	643.81	677.65	755.62	813.42
Niobrara	715.86	820.69	836.67	952.07	1050.67	1261.38
Park	614.47	667.33	742.70	820.20	893.47	1024.58
Platte	706.25	725.71	760.60	803.15	783.71	842.02
Sheridan	903.92	954.48	1014.75	1066.87	1108.37	1282.44
Sublette	452.93	504.63	532.50	602.33	682.13	818.67
Sweetwater	497.63	540.54	557.86	587.18	657.34	707.07
Teton	590.31	622.06	725.51	747.07	807.47	836.81
Uinta	604.21	672.08	721.49	758.60	789.22	807.92
Washakie	565.31	617.35	677.93	761.25	836.33	921.79
Weston	554.44	591.36	632.17	686.06	752.43	900.14
Wyoming	620.43	688.12	715.96	766.14	834.77	934.67

Personal Income Generated in the Counties as a Percent of the State Total
Wyoming Counties*

County	1975	1976	1977	1978	1979	1980
Albany	5.23	5.14	5.19	5.12	4.86	4.88
Big Horn	2.36	2.12	2.02	1.99	1.93	1.88
Campbell	4.11	4.48	5.16	5.20	5.32	5.58
Carbon	4.60	4.51	4.60	4.65	4.89	4.93
Converse	2.10	2.30	2.40	2.69	2.89	3.03
Crook	1.08	1.10	1.09	1.15	1.14	1.08
Fremont	6.33	6.52	6.71	7.08	7.19	7.10
Goshen	2.59	2.46	2.49	2.15	2.16	2.04
Hot Springs	1.16	1.18	1.07	1.05	1.04	1.05
Johnson	1.36	1.30	1.28	1.33	1.23	1.21
Laramie	17.54	16.95	15.77	15.48	14.94	14.64
Lincoln	2.33	2.36	2.30	2.21	2.23	2.24
Natrona	18.48	19.09	19.63	19.85	19.74	19.75
Niobrara	.70	.73	.68	.70	.60	.55
Park	5.24	4.95	4.99	4.67	4.56	4.39
Platte	1.47	1.50	1.62	1.62	1.79	1.81
Sheridan	5.19	5.25	5.20	5.39	5.40	5.19
Sublette	1.08	1.03	1.06	1.05	1.09	1.02
Sweetwater	9.48	9.45	9.13	9.15	9.23	9.79
Teton	2.22	2.28	2.23	2.30	2.30	2.25
Uinta	1.91	1.81	1.88	1.84	2.02	2.32
Washakie	1.90	1.81	1.76	1.75	1.81	1.72
Weston	1.70	1.70	1.72	1.58	1.63	1.55

Per Capita Dividend, Interest and Rent Income
Wyoming Counties and State*

County	1975	1976	1977	1978	1979	1980
Albany	745.99	820.54	918.73	1045.19	1205.42	1460.34
Big Horn	697.57	758.53	852.46	974.30	1145.87	1437.56
Campbell	1217.79	1266.41	1273.45	1365.05	1500.95	1525.82
Carbon	885.24	971.39	1041.10	1203.02	1400.24	1560.27
Converse	1132.13	1123.09	1137.36	1319.19	1549.86	1790.50
Crook	1148.98	1246.67	1356.42	1598.75	1984.21	2530.00
Fremont	611.92	720.25	824.49	993.59	1210.24	1396.84
Goshen	1014.87	1105.41	1273.14	1432.52	1747.74	1999.83
Hot Springs	894.29	967.84	1141.63	1380.82	1564.26	1761.05
Johnson	1378.60	1492.67	1672.13	1835.16	2148.03	2498.81
Laramie	853.17	944.48	1048.97	1227.01	1449.93	1691.02
Lincoln	794.65	810.38	857.36	1026.64	1246.30	1447.95
Natrona	115.05	1235.60	1338.09	1563.51	1889.85	2051.57
Niobrara	1448.28	1506.55	1559.67	1873.10	2187.67	2690.34
Park	1307.71	1400.97	1536.99	1773.96	2071.57	2410.79
Platte	1086.11	1155.19	1233.73	1383.26	1465.43	1544.79
Sheridan	1544.67	1655.00	1781.15	2083.39	2422.90	2792.60
Sublette	1487.07	1648.05	1702.50	2175.12	2545.53	3144.67
Sweetwater	594.08	647.44	683.83	740.63	855.92	939.11
Teton	2354.69	2658.09	3014.06	3400.67	4033.29	3960.74
Uinta	563.37	638.23	704.46	802.34	929.65	975.54
Washakie	917.41	989.52	1040.46	1226.25	1481.78	1658.63
Weston	1068.41	1159.39	1238.84	1412.11	1632.30	2004.51
Wyoming	972.64	1066.32	1160.53	1339.57	1577.91	1782.87

Comparisons of Wyoming Counties to each other and the State
Per Capita Personal Income Wyoming Counties & State

County	1975	1976	1977	1978	1979	1980
Albany	4527.00	5000.00	5776.00	6720.00	7485.00	8592.00
Big Horn	5046.00	5035.00	5496.00	6293.00	7202.00	8105.00
Campbell	6993.00	7887.00	9038.00	9535.00	10639.00	11720.00
Carbon	6127.00	7014.00	7903.00	8977.00	10645.00	11540.00
Converse	6381.00	7002.00	7537.00	8722.00	10242.00	11014.00
Crook	5345.00	6032.00	6797.00	8116.00	9537.00	10398.00
Fremont	4662.00	5395.00	6128.00	7328.00	8336.00	9038.00
Goshen	5134.00	5422.00	6394.00	6687.00	8211.00	8664.00
Hot Springs	5481.00	6121.00	6618.00	7847.00	8555.00	9447.00
Johnson	5609.00	5836.00	6600.00	7839.00	8487.00	9225.00
Laramie	6314.00	6938.00	7397.00	8533.00	9566.00	10916.00
Lincoln	5514.00	6101.00	6615.00	7340.00	8517.00	9414.00
Natrona	7671.00	8756.00	9926.00	11191.00	12785.00	14072.00
Niobrara	5616.00	6754.00	7161.00	8763.00	8833.00	9691.00
Park	6453.00	6800.00	7913.00	8533.00	9600.00	10385.00
Platte	4734.00	5274.00	6103.00	6760.00	7664.00	7735.00
Sheridan	6020.00	6667.00	7418.00	8696.00	9868.00	10610.00
Sublette	6401.00	7029.00	7866.00	9474.00	11123.00	11436.00
Sweetwater	7107.00	7827.00	8187.00	8990.00	10320.00	12016.00
Teton	7251.00	7999.00	8716.00	9659.00	10739.00	12315.00
Uinta	4557.00	4922.00	5611.00	6165.00	7563.00	9142.00
Washakie	5441.00	5811.00	6254.00	7319.00	8810.00	9289.00
Weston	6429.00	7006.00	7856.00	8261.00	9955.00	11193.00
Wyoming	6119.00	6791.00	7558.00	8572.00	9798.00	10875.00

Population of Counties as a Percent of the State
Wyoming Counties*

County	1975	1976	1977	1978	1979	1980
Albany	7.2	7.1	7.0	6.7	6.6	6.2
Big Horn	3.0	3.0	2.9	2.8	2.8	2.5
Campbell	3.5	3.7	4.1	4.5	4.7	5.2
Carbon	4.5	4.4	4.5	4.5	4.6	4.7
Converse	2.1	2.4	2.6	2.9	3.1	3.0
Crook	1.3	1.3	1.3	1.3	1.3	1.1
Fremont	8.3	8.2	8.3	8.4	8.4	8.3
Goshen	3.1	3.1	3.0	2.8	2.6	2.6
Hot Springs	1.3	1.3	1.2	1.2	1.2	1.2
Johnson	1.5	1.5	1.5	1.5	1.5	1.4
Laramie	16.8	16.3	15.8	15.2	15.1	14.6
Lincoln	2.6	2.7	2.7	2.7	2.6	2.6
Natrona	14.6	14.6	14.7	14.9	14.8	15.3
Niobrara	.8	.7	.7	.7	.7	.6
Park	5.0	5.0	4.8	4.8	4.7	4.6
Platte	1.9	2.0	2.0	2.1	2.3	2.6
Sheridan	5.3	5.4	5.3	5.3	5.4	5.3
Sublette	1.1	1.0	1.1	1.0	1.0	1.0
Sweetwater	8.1	8.1	8.3	8.6	8.6	8.9
Teton	1.7	1.7	1.7	1.8	1.8	2.0
Uinta	2.5	2.5	2.5	2.5	2.6	2.8
Washakie	2.2	2.1	2.1	2.1	2.0	2.0
Weston	1.7	1.7	1.7	1.7	1.6	1.5

Total Employment
Wyoming Counties and State

County	1975	1976	1977	1978	1979	1980
Albany	11705	12364	13246	14120	14520	14802
Big Horn	4908	4966	5154	5315	5439	5702
Campbell	7923	9375	11999	12897	14385	15297
Carbon	8768	9208	10497	11145	12241	13205
Converse	4128	4738	5565	5852	6609	7479
Crook	2232	2318	2444	2645	2569	2578
Fremont	12827	13775	15393	17339	18037	18783
Goshen	5386	5526	5528	5808	5882	6000
Hot Springs	2411	2340	2290	2373	2555	2695
Johnson	2829	32738	2737	3097	3209	3400
Laramie	33164	33873	34773	36988	38616	39523
Lincoln	4823	5080	5411	5372	5801	6254
Natrona	30190	31826	35492	39803	42001	43206
Niobrara	1425	1387	1374	1529	1392	1465
Park	10324	10674	11117	12019	12166	12427
Platte	3540	3690	3876	4711	5548	5455
Sheridan	9309	9691	10165	11107	11723	11837
Sublette	2227	2155	2234	2185	2325	2527
Sweetwater	17450	18225	18879	20755	21983	23901
Teton	4965	5389	5839	6559	7137	7174
Uinta	3864	3823	4143	4591	5437	6572
Washakie	3884	4193	4349	4675	4987	5081
Weston	3064	3089	3180	3269	3578	3646
Wyoming	191366	200443	215685	234154	248140	259009

NOTE: Figures have been revised by Bureau of Economic Analysis since data was presented in the Spring 1982 issue of WQU.

*Totals subject to rounding error.

Figure 9: Government

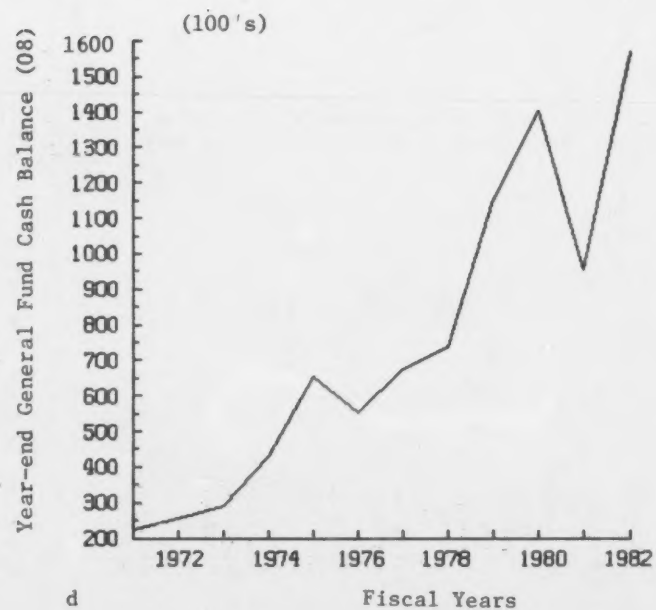
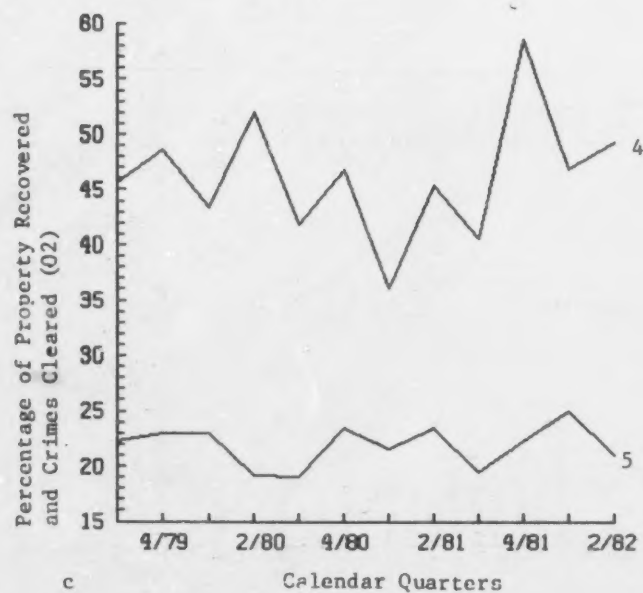
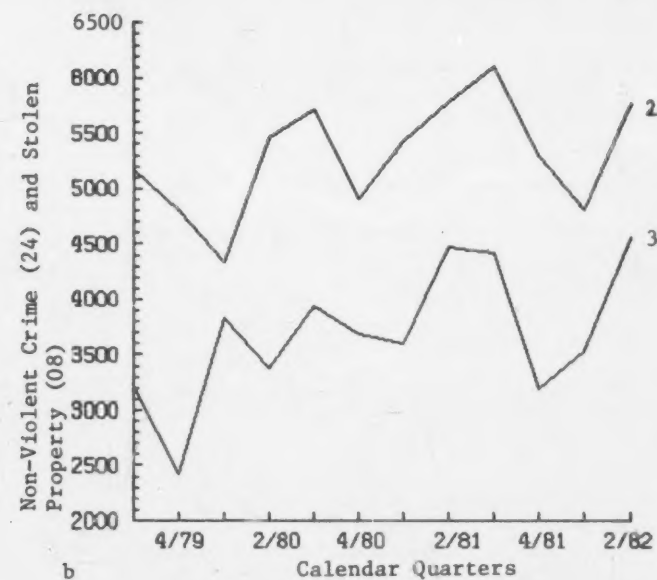
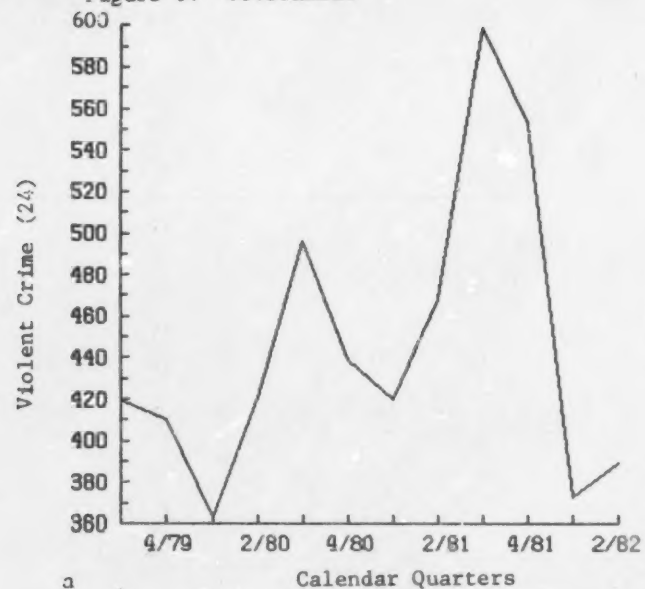


Table 9: Government

Calendar Quarters	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82
Criminal Justice Statistics												
1. Violent Crime ¹ (24)	419.	410.	363.	421.	496.	439.	420.	468.	599.	553.	373.	389.
2. Nonviolent Crime ² (24)	5172.	4803.	4331.	5464.	5710.	4916.	5430.	5783.	6111.	5299.	4811.	5778.
3. Stolen Property (08)	3207.	2421.	3837.	3374.	3945.	3696.	3601.	4471.	4421.	3201.	3541.	4562.
4. Stolen Property Recovery Rate (02)	45.6	48.6	43.4	51.9	41.9	46.8	36.0	45.4	40.6	58.6	46.9	49.3
5. Percent of Crimes ³ Cleared (02)	22.3	23.0	23.0	19.1	19.0	23.4	21.6	23.4	19.5	22.3	24.9	21.0
Tax Revenues												
6. Sales and Use Tax Collections (08)	47815.	41630.	48511.	58928.	59626.	57547.	58605.	64136.	66012.	68766.	73830.	66759.
Fiscal Years	1/71	1/72	1/73	1/74	1/75	1/76	1/77	1/78	1/79	1/80	1/81	1/82
7. Year End General Fund Cash Balance (08)	22469.	25648.	28944.	42988.	65516.	55115.	67542.	73540.	115318.	140203.	95437.	156895.

Within the past 10 years, the office of the State Auditor has not reported an increase in the year end general fund cash balance as large as that shown in 1982. A budget surplus of \$61,458 was added to the general fund during the fiscal year of 1982, representing a 64.40 percent increase over fiscal year 1981.

Sales and use tax collections followed the same healthy trend during the year ending June 30, 1982. Although the dollar amount collected decreased 9.58 percent during the last quarter of the year, ending June 30, 1982, 2/82 collections were still up 4.09 percent over 2/81 collections. Pairing the overall increase in sales and use tax collections within the past year with the dramatic decrease in Wyoming's annual rate of inflation to 5.6 percent indicates some real growth in sales subject to tax during the past fiscal year.

An 18.96 percent increase in total crimes reported to Wyoming law enforcement agencies during 2/82 displays the usual upswing in crime generally reported during the second quarter. Figures for reported violent and nonviolent crimes are, nevertheless, favorable when compared with 2/81 statistics; violent crime was down 16.88 percent, while nonviolent crime decreased .09 percent. Other related crime data for 2/82 was not as encouraging. A total of 1,292 clearances were noted during the second quarter, resulting in a clearance rate 15.66 percent below 1/82 and 10.26 percent below 2/81.

The recovery rate of stolen property for 2/82 increased 2.4 percentage points, or 5.12 percent (not percentage point), above the rate recorded for 1/82. The value of property stolen also increased.

¹ Murder, negligent homicide, forcible rape, robbery, aggravated assault.

² Burglary, larceny, auto theft.

³ Clearance of a crime indicates resolution of a complaint by arrest or other extraordinary means.

Figure 10. Education

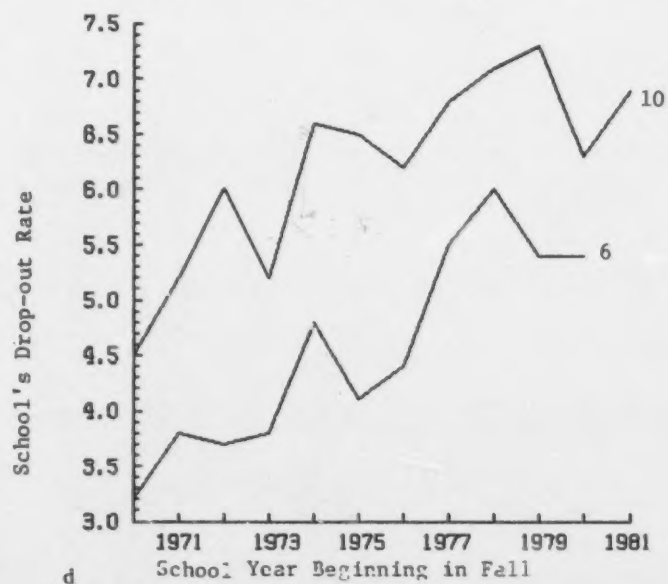
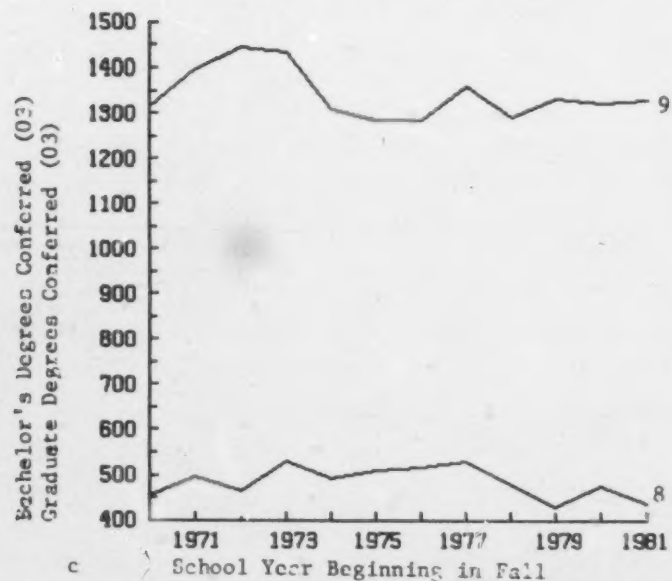
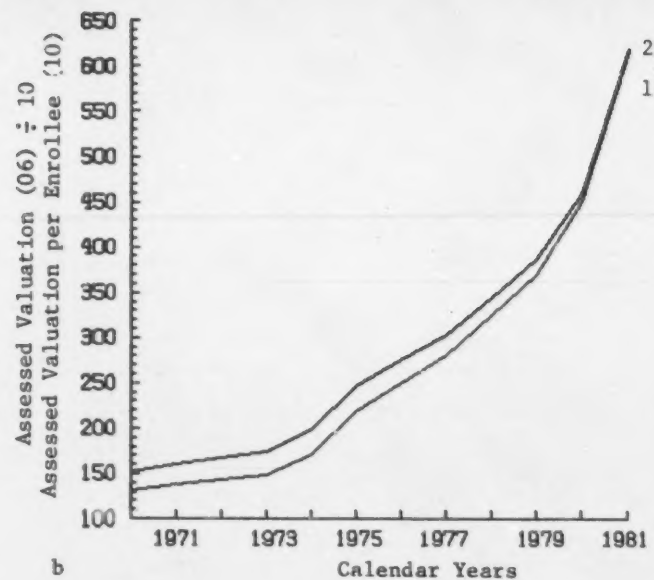
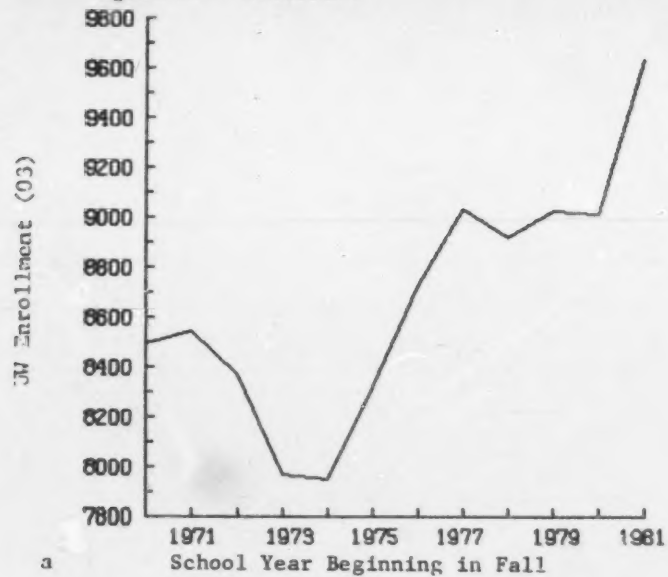


Table 10: Education

Calendar Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
1. Assessed Valuation (06)	1318.	1384.	1436.	1486.	1709.	2168.	2489.	2804.	3252.	3703.	4515.	6176.
2. Assessed Valuation (10) Per Enrollee	151.7	160.3	167.0	174.0	197.4	245.9	274.8	303.7	344.7	387.7	459.3	620.4
3. Enrollment (03)	86886.	86430.	85975.	85391.	86584.	88184.	90587.	92321.	94328.	95505.	98305.	99541.
4. FTE ² Classroom Teachers (03)	I.N.A.	I.N.A.	4735.0	4564.6	4678.9	4751.9	4916.8	5024.7	5186.6	5378.3	5539.9	5697.8
5. Pupils/Teachers Ratio (03)	I.N.A.	I.N.A.	18.2	18.7	18.5	18.6	18.4	18.4	18.2	17.8	17.7	17.5
6. Drop-Out Rate	3.2	3.8	3.7	3.8	4.8	4.1	4.4	5.5	6.0	5.4	5.4	I.N.A.
7. Enrollment, University of Wyoming (UW) (03)	8495.	8546.	8369.	7971.	7949.	8322.	8726. ³	9031.	8923.	9024.	9014.	9635. ⁴
8. UW Graduate ⁵ Degrees Conferred (03)	453.	496.	464.	531.	491.	507.	517.	531.	476.	431.	474.	435.
9. UW Bachelors ⁵ Degrees Conferred	1315.	1397.	1444.	1433.	1306.	1282.	1283.	1359.	1289.	1332.	1320.	1328.
10. UW Withdrawal ⁶	4.5	5.2	6.0	5.2	5.6	6.5	6.2	6.8	7.1	7.3	6.3	6.9

1981 Wyoming public school statistics show that assessed valuations rose 36.79 percent above 1980 valuations, marking the largest increase WQU has recorded since we began compiling education data. Assessed valuation per enrollee went up at approximately the same rate of increase (Graph B), increasing 35.08 percent from 1980. Considering that the state's inflation rate was 6.11 percent from 1980 to 1981, and the fact that enrollment increased only a slight 1.26 percent during the same period, there was real growth in both total and per enrollee assessed valuation in 1981. Looking at other public school figures, we see that a 2.85 percent surge in the number of full-time equivalent classroom teachers resulted in an improved 17.5 pupil/teacher ratio.

Fall enrollment at the University of Wyoming increased a substantial 6.89 percent in 1981, following a brief decline in 1980. Preliminary data indicate that Fall 1982 enrollment is likely to top 10,000 for the first time UW's history. The 1981-82 Fall and Spring withdrawal rate amounted to 6.9 percent. Graduate students represented the largest portion of the official withdrawals during 1981, which perhaps contributed to the 8.23 percent decline in the number of graduate degrees conferred.

¹Data are for the fall of the year indicated by the column heading for Series 2-7.

²FTE: full time equivalent.

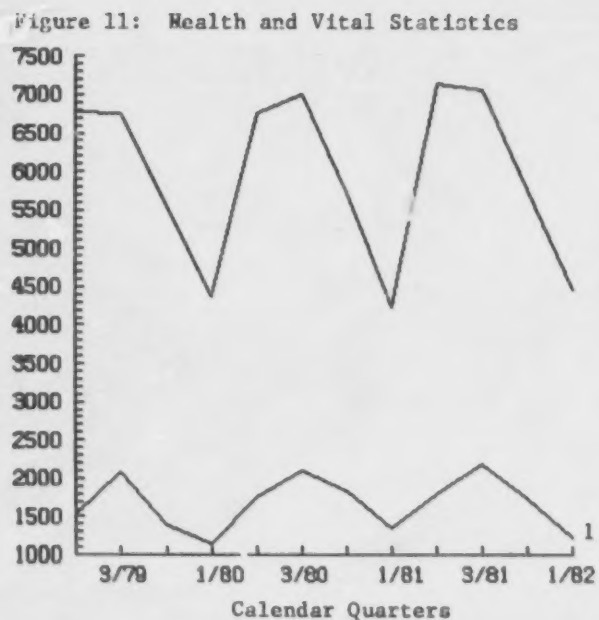
³Beginning 1976, data include students rolled in UW degree program at Casper.

⁴Complete Fall 1982 enrollment figures are not yet available.

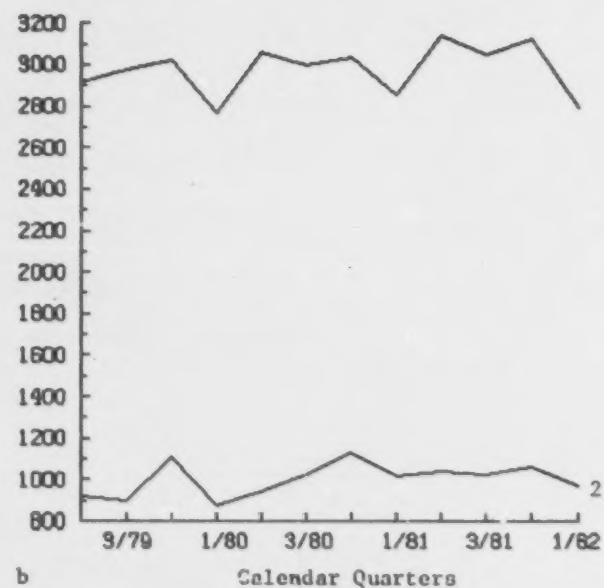
⁵August and December of the year indicated, and May of the year following.

⁶Students withdrawing divided by enrollment times 100.

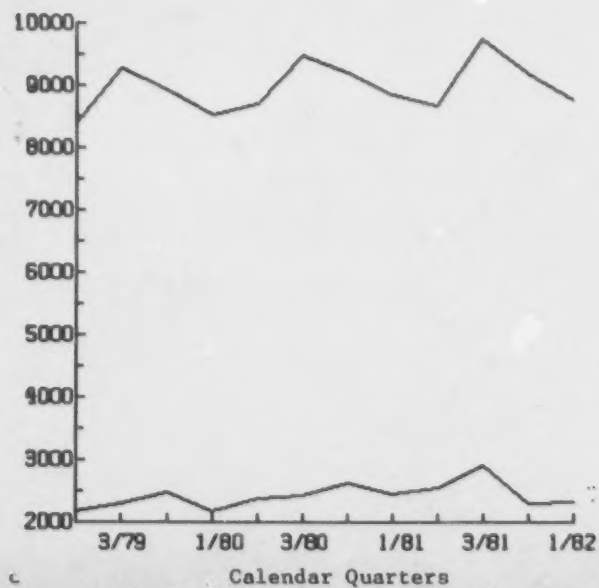
Marriages in the U.S. (32) and Wyoming (03)



Divorces in the U.S. (32) and Wyoming (03)



Births in the U.S. (32) and Wyoming (03)



Deaths in the U.S. (32) and Wyoming (03)

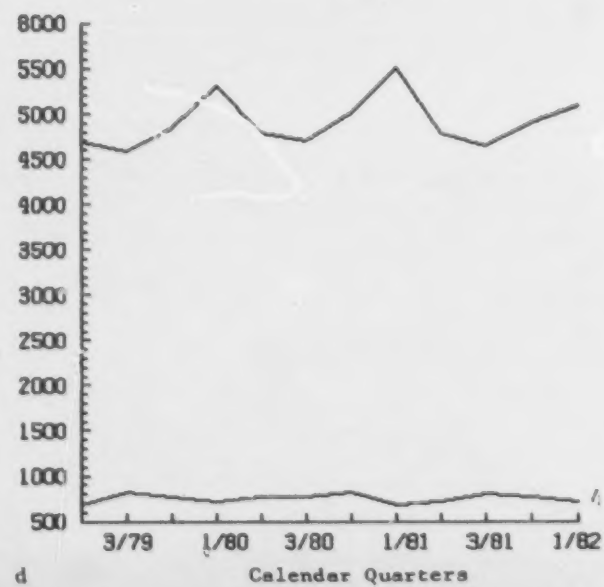


Table 11: Health and Vital Statistics

Calendar Quarters	2/79	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82
1. Marriages (03)	1531.	2073.	1386.	1149.	1761.	2088.	1827.	1354.	1784.	2177.	1737.	1234.
2. Divorces (03)	920.	898.	1106.	875.	941.	1022.	1132.	1021.	1042.	1023.	1066.	969.
3. Births (03)	2166.	2277.	2453.	2158.	2364.	2412.	2605.	2428.	2545.	2897.	2292.	2309.
4. Deaths (03)	688.	812.	765.	712.	760.	776.	814.	686.	708.	803.	772.	710.

Quarterly vital statistics demonstrate the definite seasonal fluctuation of marriages. Graph A, which compares provisional counts of marriages in the United States and Wyoming, makes it particularly evident that marriages take a sharp drop during the first quarter of any year and reach their peak during the third quarter. 1/82 followed tradition, marking a 28.96 decrease in unions compared to 4/81.

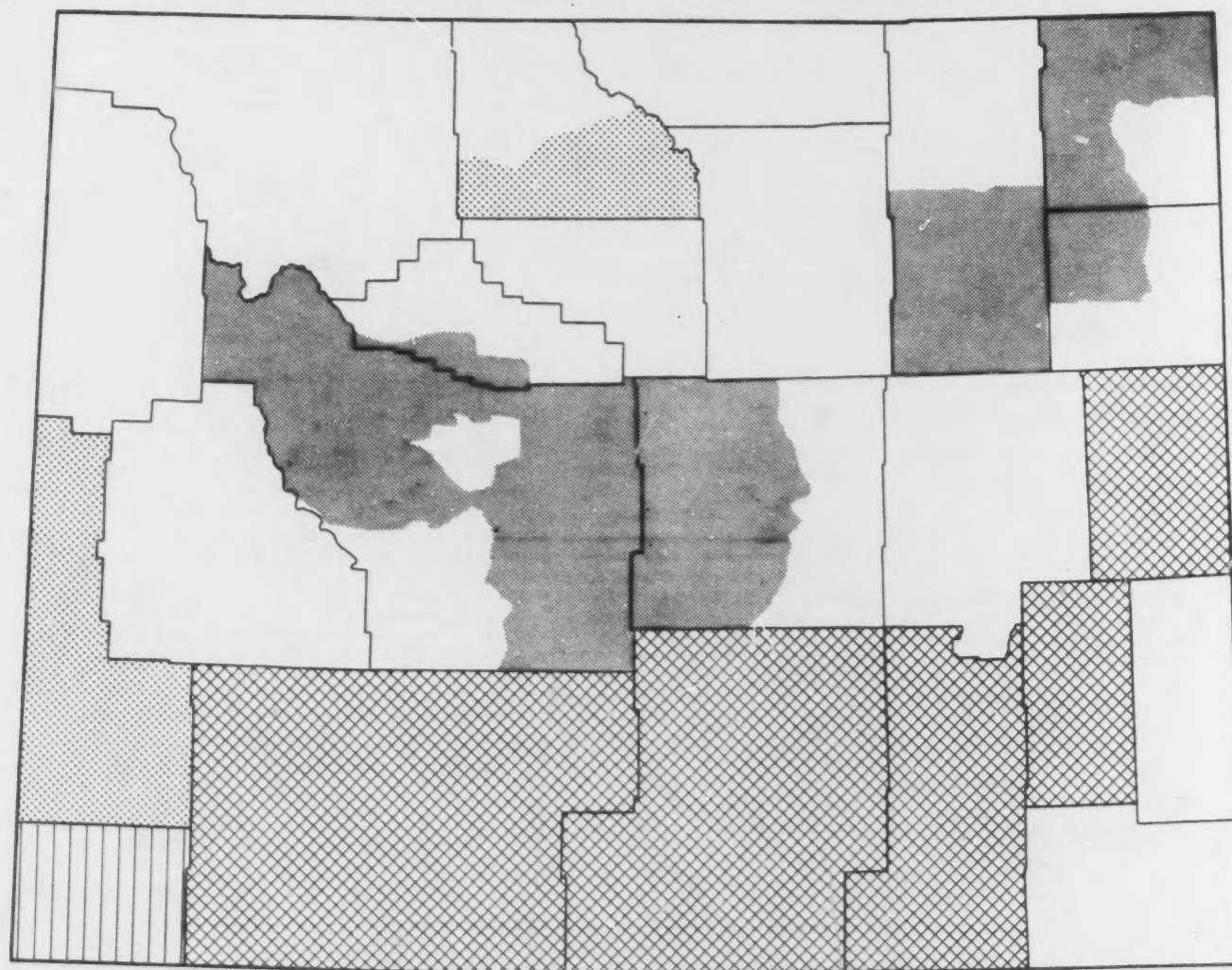
Divorces are not as predictable throughout the year. While the percent change in the number of marriages is remarkably constant from quarter to quarter, the number of divorces granted fluctuates in an incalculable pattern. One event that should be noted is the sharp rise in divorces during 1980. It is also interesting to note that within this same time period, the highest national divorce total ever recorded was observed. More recently, Wyoming divorce statistics have been leveling off during a time when total divorces in the United States have been steadily on the rise.

Trends in the number of live births throughout the year bear resemblance to the marriage statistics. The third quarter of 1981 supports this likeness most obviously, displaying an increase of 13.83 percent over the second quarter and a 20.88 percent decrease into the fourth quarter. The number of births showed an increase during the third quarter of 1979 and 1980; however, the increases were maintained into the fourth quarter as well.

Within the past 12 quarters, there have not been any significant increases or decreases represented in the death totals. The largest increase in the number of deaths occurred from 2/79 to 3/79 at a rate of 18.02 percent; the largest decline appeared during the period of 4/80 to 1/81 at a rate of 15.72 percent.

An estimated 1,599 persons were added to Wyoming's population in the course of 1/82 as, a result of natural increase (the excess of births over deaths). This increase was due to the decline in the death count.

PRIMARY CARE PHYSICIANS BY COUNTY



DEGREE OF SHORTAGE: ■ 01 Most Severe; ||| 02 Severe; ▨ 03 Moderately Severe
▩ 04 Less Severe

SOURCE: Federal Register, Vol. 45, No. 167, Tuesday, August 26, 1980, page 57051.

Wyoming Medical Facilities	POPULATION ¹	LICENSED MEDICAL FACILITIES ²	HOSPITALS	# LICENSED BEDS	OCCUPANCY RATE	NURSING CARE FACILITIES	# LICENSED BEDS	OCCUPANCY RATE	EMERGENCY ROOMS	OUTPATIENT CLINICS & EMERGENCY CARE	PRIMARY AMBULANCES	MENTAL HEALTH CENTERS	PHARMACIES				
TOTAL	470,816	57	27	2,034	58%	29	2196	92%	28	14	131	25	116				
ALBANY	29,062	2	1	90	71%	1	120	94%	1	1	7	1	6				
BIG HORN	11,896	5	2	58	33%	3	111	91%	3		4	1	5				
CAMPBELL	24,367	2	1	52	78%	1	120	94%	1	1	4	1	5				
CARBON	21,896	3	1	85	47%	2	138	94%	1	2	10	1	5				
CONVERSE	14,069	2	1	32	54%	1	60	88%	1	1	4	1	4				
CROOK	5,308	1	1	16	53%				1	1	5	1	1				
FREMONT	40,251	4	2	121	74%	2	150	94%	2	2	11	3	7				
GOSHEN	12,040	2	1	56	53%	1	72	100%	1		7	1	4				
HOT SPRINGS	5,710	3	1	50	38%	2	194	96%	1		4	1	2				
JOHNSON	6,700	3	1	35	49%	2	104	99%	1		4	1	3				
LARAMIE	68,649	4	2	300	63%	2	274	95%	2		8	1	13				
LINCOLN	12,177	2	2	35	32%				2		6	2	4				
NATRONA	71,856	3	1	282	60%	2	278	76%	1		8	1	14				
NIOBRARA	2,924	2	1	12	35%	1	36	88%	1		2		1				
PARK	21,639	4	2	89	49%	2	123	100%	2		8	1	7				
PLATTE	11,975	2	1	43	56%	1	40	98%	1		8	1	2				
SHERIDAN	25,048	2	1	97	62%	1	120	97%	1		7	1	8				
SUBLETTE	4,548									2	2	1	2				
SWEETWATER	41,723	2	1	100	48%	1	101	98%	1	1	10	1	10				
TETON	9,355	2	1	43	52%	1	12	100%	1	1	4	1	4				
UINTA	13,021	3	2	372		1	26	94%	1	1	3	1	3				
WASHAKIE	9,496	2	1	36	60%	1	76	97%	1		2	1	3				
WESTON	7,106	2	1	30	44%	1	41	86%	1	1	3	1	3				

¹ Based on 1980 Census.² State Psychiatric Hospital in Evanston, Uinta County, is included in total.

Table 12: Banking and Finance

Calendar Quarters	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82
1. Total Bank Loans (08)	1667332.	1661606.	1677881.	1689496.	1722916.	1764381.	1808747.	1898325.	1929706.	1984965.	2004233.	2123492.
2. Total Bank Deposits (08)	2510176.	2734107.	2651863.	2755238.	2826427.	3034647.	2968348.	3112270.	3161593.	3278504.	3237333.	3322621.
3. Total Bank Demand Deposits (08)	748983.	865452.	746467.	796838.	839111.	878444.	736161.	737837.	759658.	731429.	657349.	635856.
4. Bankers' Loan-Deposit Ratio	.66	.61	.63	.61	.61	.58	.61	.61	.61	.61	.62	.64
5. Savings and Loan Mortgage Loans (08)	687735.	706103.	711387.	719627.	741479.	770474.	776172.	788526.	785208.	778334.	762153.	758285.
6. Savings and Loan Deposits (08)	689301.	724538.	749815.	770186.	788448.	842740.	874533.	891585.	911587.	904212.	921642.	911188.

With the nationwide recession probably bottoming out during 2/82, it appears that Wyoming banks' fortunes improved, but the plight of savings and loans (SL) continued to worsen. The percent of bank deposits loaned out was higher than any quarter since 3/79. Bank loans during 2/82 were 6.0 percent higher than 1/82 and 11.9 percent higher than 2/81, in both cases well above Wyoming's inflation rate of 5.64 percent between 2/81 and 2/82. Total bank deposits were also up in 2/82, although only barely in excess (1.2 percentage points) of inflation. The high cost of leaving money in noninterest bearing accounts continued to prompt the shrinkage of bank demand deposits. During 2/82, they were off 13.8 percent from 2/81, and down 3.3 percent from 1/82.

The impact of widespread publicity of high interest rates on the nation's SLs is also reflected in the data for Wyoming, but to a lesser degree. SL mortgage loans during 2/82 were off 3.8 percent from 2/81, and down 0.5 percent from 1/82. SL deposits were up (2.2 percent), but less than the rate of inflation. SL deposits fell 1.1 percent since 1/82.

A provision for a withholding tax on interest and dividend earnings in the just-passed federal tax legislation and a ruling by the U.S. Supreme Court that permits federal SLs to block assumption of existing mortgages by homebuyers could have a major impact on banking and finance. Those changes are discussed in greater detail in the opening pages of this WQU.

¹Only members of the Federal Home Loan Bank Board are included.

Laramie County Profile
by John Merrifield and Ruth Tebbutt

PHYSICAL CHARACTERISTICS AND CLIMATE

Laramie County is situated in Wyoming's southeast corner (Map 1). County seat and state capitol Cheyenne is located 40 miles west of the Nebraska border and 10 miles north of the Colorado border. Until the 1980 census, Cheyenne was officially the state's largest city. However, Casper's rapid growth during the 1970s moved it to the number one spot with an April 1, 1980, population of 51,016. The Census Bureau counted 47,283 people in Cheyenne on April 1, 1980, and 68,649 in all of Laramie County.

Laramie County is best characterized as rolling prairie bordered by the foothills of the Laramie Range mountains in the western part of the county. Elevations vary from 4,800 in the east to near 7,000 in the west. The elevation rises steadily from east to west over most of the county.

The steady rise of the land from east to west has a major impact on the area's climate. The most frequent westerly winds result in a phenomenon called the Chinook effect. The

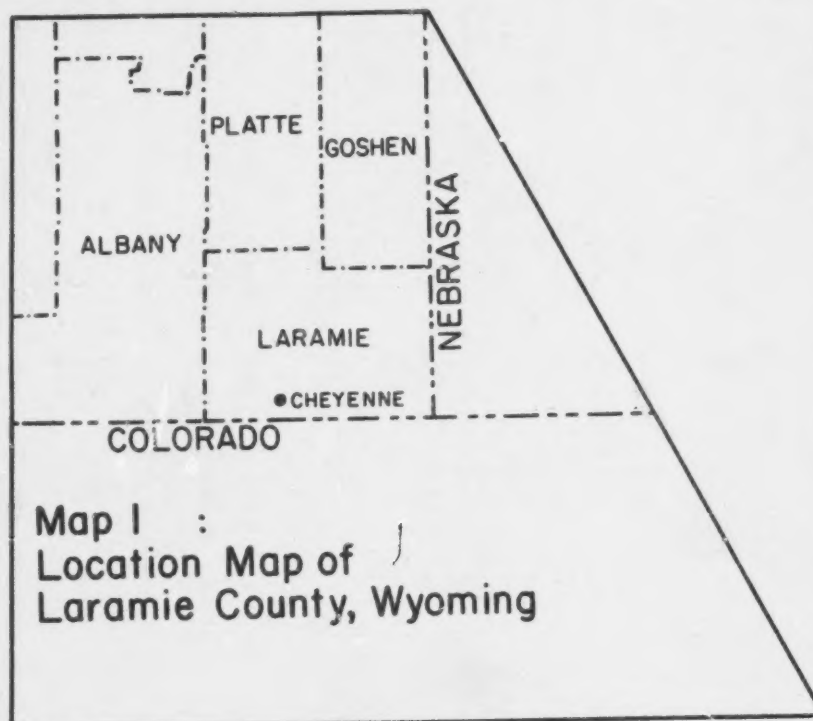
downslope flow of the Chinook winds frequently results in warm, dry conditions when westerly winds blow. If moist air is combined with the less prevalent easterly flow, low stratus clouds, together with fog and light but steady and longlasting rain may result. Because of its relatively high elevations and the occurrence of several different types of air masses in Laramie County, daily and seasonal temperature variations are substantial. The daily high and low varies by 30°F in the summer and 23°F in the winter. Seasonal mean temperatures range from 25°F in the winter to 70°F in the summer. Differences in elevation are also reflected in summer high temperatures. Pine Bluffs (5072'), adjacent to the Nebraska border, averages 44 days per summer with high temperatures of 90°F or more. Cheyenne averages only twelve 90-plus days per summer. Episodes of severe winter temperatures are reduced by the downslope flow of westerly and northwesterly winds. Only 13 and 11 sub-zero days are recorded, on average, in Pine Bluffs and Cheyenne, respectively.

The mountains to the west also work to reduce the county's precipitation. Average annual precipitation is only 15.6", of which 60 percent falls during the dates delineating the annual frost-free period. December is the driest month, and May or June are usually the wettest months. Most of the precipitation comes from thunderstorms, sometimes including destructive hailstorms. Laramie County is also on the fringe of "tornado alley," and among Wyoming counties is the most likely to experience such an event. The tornado of a few years ago demonstrated the potential devastation that can be caused.

HISTORY

Until 1867, when the construction of the west coast-bound Union Pacific Railroad commenced, various tribes of plains' Indians were the principal inhabitants of Laramie County. The Indians found that Laramie County's climate and topography made it a good hunting area.

On behalf of the Union Pacific Railroad, General Grenville Dodge conducted a Spring, 1867, survey of present-day Laramie County. His discovery of a suitable route through the Pole Mountain area, Laramie County's even terrain, and Indian troubles in the vicinity of alternative routes resulted in the railroad's placement in Laramie County. In June, 1867, General Dodge and Army General C.C. Augur met and selected sites for Fort D.A. Russell and a railroad division point which they named Cheyenne. In July, 1867, the railroad reached Cheyenne. Initially, the new



Map 1 :
Location Map of
Laramie County, Wyoming

Table 13: Laramie County Profile

Calendar Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
1. Births (03)	1194.	1162.	1131.	1189.	1181.	1179.	1139.	1162.	1181.	1321.	1374.	1357. ¹
2. Deaths (03)	444.	503.	453.	507.	74.	488.	482.	493.	478.	455.	494.	479. ¹
3. Divorces (03)	388.	395.	507.	484.	529.	627.	620.	586.	623.	697.	645.	756. ¹
4. Marriages (03)	789.	902.	1091.	1902.	1555.	1244.	1147.	1012.	1102.	1093.	1109.	1084. ¹
5. Oil Production (26)	4208.	INA	3008.	2710.	2587.	2418.	2697.	4354.	3230.	2650.	2307.	2000. ²
6. Valuation of Oil Production (10)	13020.	INA	10037.	10365.	16448.	16292.	19175.	44092.	31787.	39107.	59359.	INA
Fiscal Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
7. AFDC Recipients (03)	INA	INA	6621.	6002.	5894.	5418.	6060.	6424.	6667.	7267.	8055.	8371.
8. Food Stamp Recipients (03)	INA	1961.	1956.	1261.	1226.	1549.	1677.	1734.	1631.	2013.	3104.	3504.
9. AFDC Payments (05)	INA	INA	995281.	929172.	952524.	888308.	1152600.	1341980.	1408522.	1760242.	2182638.	2302959.
Calendar Quarters	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82
10. Civilian Labor Force (03)	31326.	30706.	29626.	30663.	31963.	31867.	30122.	31704.	32745.	32430.	32890.	33725.
11. Employment (03)	30534.	29713.	28387.	29382.	30732.	30499.	28409.	29991.	31168.	30915.	31192.	32035.
12. Unemployment (03)	792.	993.	1238.	1281.	1231.	1367.	1713.	1712.	1577.	1515.	1699.	1690.
13. Unemployment Rate (02)	2.5	3.2	4.2	4.2	3.9	4.3	5.7	5.4	4.8	4.7	5.2	5.0
14. Hotel, Motel & Camp Sales & Use Tax (05)	149761.	114773.	109120.	122077.	186292.	141559.	118294.	154798.	208807.	131136.	122085.	119335.
15. Net Collections, Sales & Use Tax (05)	2949537.	3655830.	4217397.	4650864.	4547892.	4332093.	4163129.	4543724.	4576933.	4561025.	4951840.	4589129.
16. Liquor Sales (05)	931873.	1261383.	890158.	1013149.	1109460.	1452509.	966474.	1073166.	1102155.	1373247.	998576.	1207084.
17. Gasoline Gallonage (22)	11837282.	11509678.	9453344.	10593182.	11936497.	9968295.	9226488.	10348955.	11398714.	10710947.	8494967.	10974415. ³
Calendar Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
18. Population* (03)	56360.	57900.	59500.	61400.	62700.	63100.	63800.	64300.	64800.	67700.	68449.	INA
Fiscal Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
19. State Board of Equalization Valuations (08)	2054.	21068.	22313.	23823.	25286.	27866.	30240.	32150.	37526.	38779.	46235.	54395.
20. Locally Assessed Property Valuations (08)	84879.	85914.	88088.	92068.	97598.	103577.	117189.	123563.	128173.	139948.	149024.	151553.
21. Cigarette Tax Dist. (05)	274680.	282948.	301174.	361286.	357095.	371453.	389974.	389479.	409815.	419705.	444986.	444119.

¹Provisional data from the Wyoming Department of Public Health, Division of Vital Statistics²Projection by the Department of Economic Planning and Development.³Estimate based on trend and April data.

*1971 through 1979 are estimates made by the Bureau of the Census, not actual counts as in 1970 and 1980.

Figure 12a: Laramie County On-Line Data Base

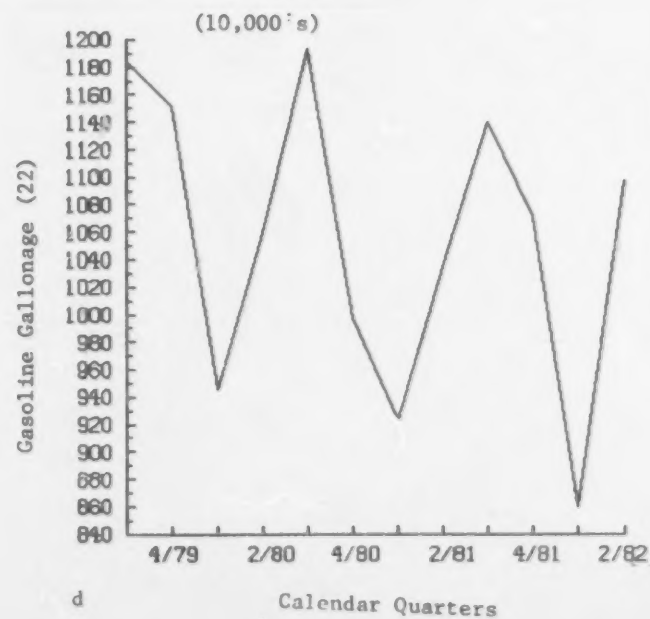
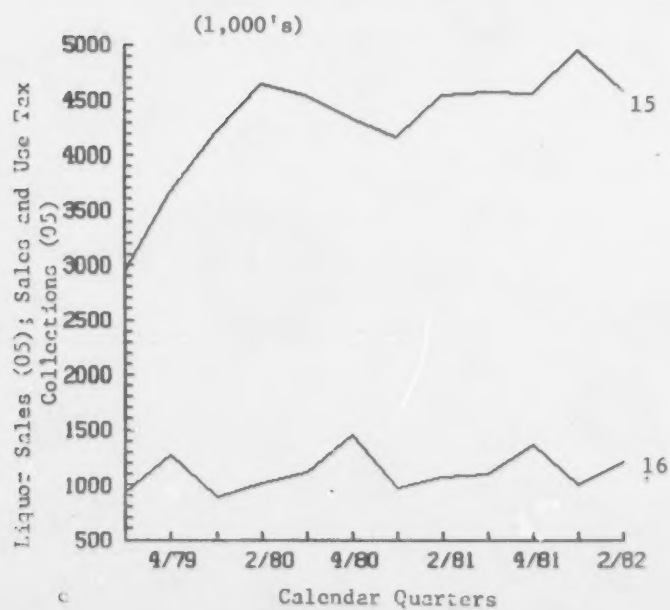
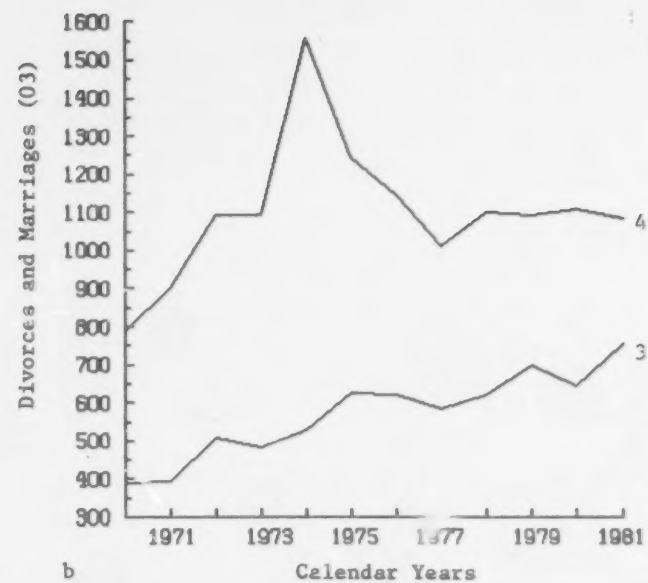
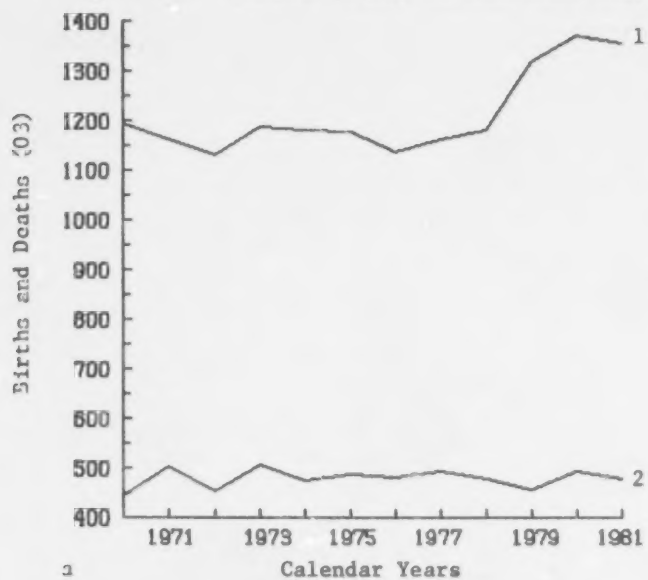
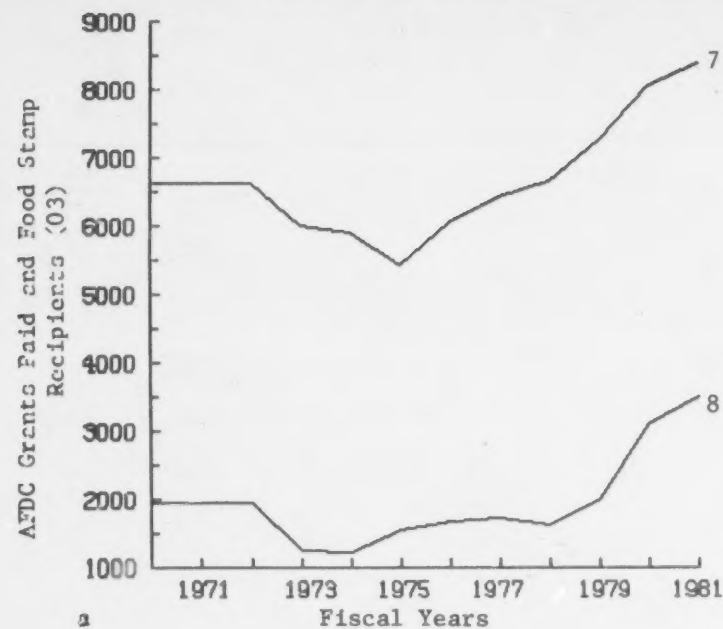
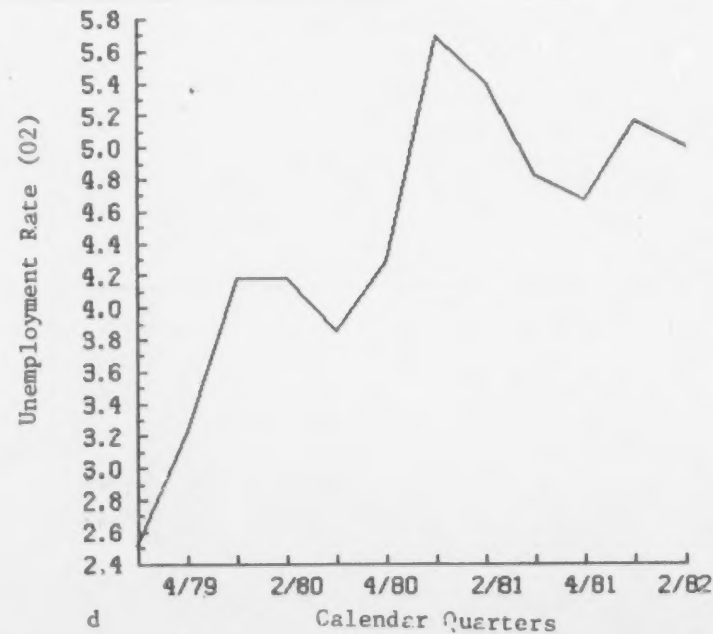
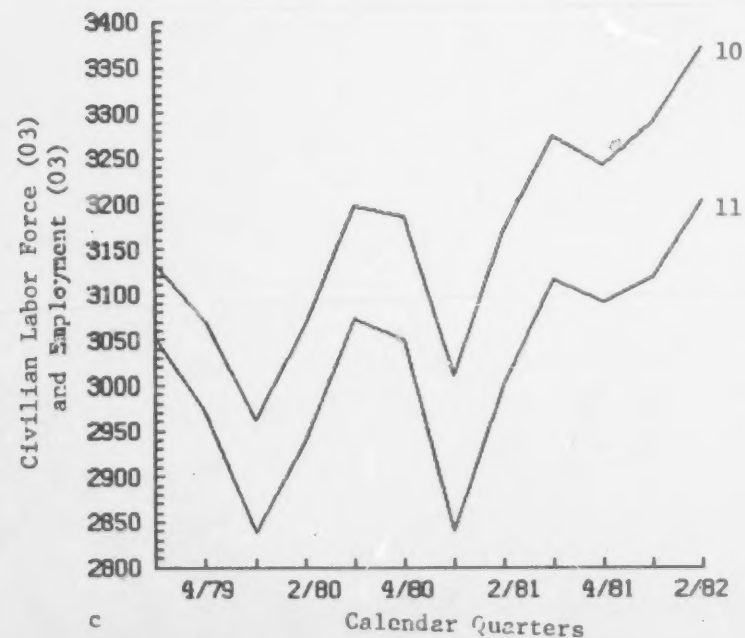
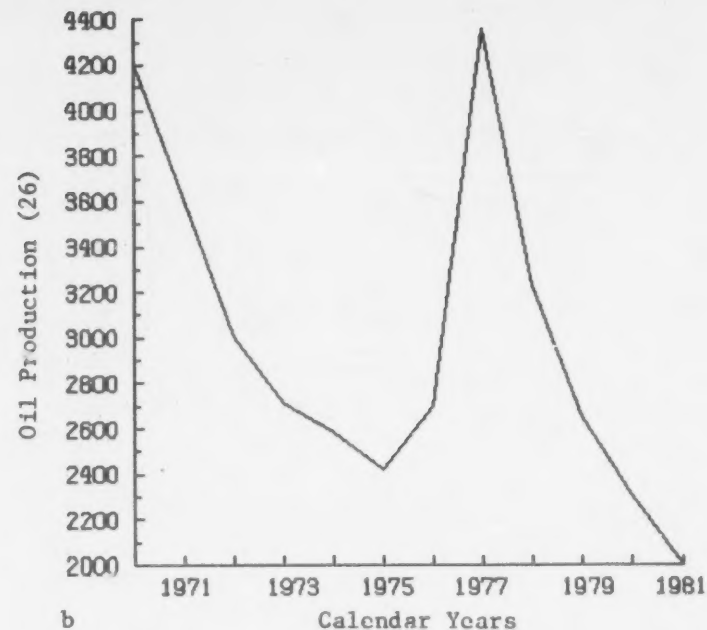


Figure 12b: Laramie County On-Line Data Base



(10's)



city's population grew, but as the railroad moved further west it declined. Fort Russell was an important outpost, providing protection from Indian raids to residents and railroad workers. Fort Russell has since become part of the Francis E. Warren Air Force Base (AFB), and the railroad and military continue to be a major part of the county's economy.

1867 continued to be a busy year. All of the Dakota territory west of the 104th meridian was designated Laramie County by the territorial legislature. The county seat was established in Fort Sanders, located near the current site of the city of Laramie. In the fall of 1867, the county seat was moved to Cheyenne, and two representatives from Laramie County were elected to the lower house of the territorial legislature. Population growth along the new Union Pacific rail line prompted Congress to separate the Wyoming Territory from the Dakota territory. In 1869, John Campbell became Wyoming's first territorial governor, and later that year the first legislative assembly met in Cheyenne. Progressive legislation was enacted, including voting rights for women.

The Black Hills gold discovery of 1874 was a major event in Cheyenne's history. The railroad delivered and received hundreds of people, thousands of dollars in gold, and supplies to the Black Hills by way of the Cheyenne-Deadwood stage line. The gold mining activity also induced a number of heavy freight firms to locate in Cheyenne. At one time, as many as 20 such firms had their headquarters in Cheyenne.

Big ranches and cattle kingdoms also played a major role in the county's history. Pine Bluffs became an important cattle loading station, and slaughterhouses were built in Sherman and Cheyenne in order to avoid the higher cost of shipping live cattle. The influence of cattle-raising was diminished by a series of severe winters and dry summers.

Other major events in the history of Laramie County include the establishment of a road fund in 1909, establishment of an airport in 1922, and growing use of the airport by airlines and for mail runs through 1948. In 1948, United Airlines moved its facilities from Cheyenne. Fortunately, the reduced economic activity resulting from United's pullout was offset somewhat by the build-up of Warren AFB.

Laramie County experienced another boom-bust cycle in the 1960s, when Warren AFB became the site of a major Intercontinental Ballistic Missile (ICBM) installation. When construction of the ICBM site was completed, numerous vacant homes and businesses resulted from the departure of the construction workers. The 1970s were more stable years. According to a July 1, 1982, article in the Laramie Boomerang, a diversified economy and growth in relatively stable government employment were decisive factors in minimizing fluctuations in economic activity.

NATURAL RESOURCES

Minerals

The Laramie County part of Wyoming's Mineral Resource Map is blank. No significant mineral deposits are indicated for Laramie County. According to the 1981 Mineral Yearbook, only construction materials such as sand, gravel, and crushed rocks were produced in 1980. Production of those commodities was valued at approximately \$3 million in 1980.

While current activities are confined to production of construction materials, past activity included silver and copper mining. The Silver Crown Mining District, 20 miles west of Cheyenne, was organized in 1879. Most of the mining took place from 1881 to 1910 at the Comstock Copper Mine and the Copper King Mine. Both mines are now abandoned. Palladium, zinc, and gold ores are also known to exist in the Silver Crown Mining District. Some asbestos, bentonite, and gypsum deposits are also located in Laramie County.

Fossil Fuels

According to the 1981 Mineral Yearbook, \$5.9 million worth of oil was produced in Laramie County in 1980. Oil output has declined from 1968 production of 670,000 barrels. The 1980 output level of 229,000 barrels is expected to decline further to 200,000 barrels.

Land

In contrast to most of Wyoming, Laramie County includes very little government-owned land. In fact, 90.4 percent of the 2,079 square mile county is privately owned. Another 7.4 percent is owned by the state and county. Most of the balance is divided among Warren AFB, the Bureau of Land Management, and the City of Cheyenne.

Water

Laramie County is part of the area drained by the North and South Platte Rivers. Only the Horse and Chugwater Creeks flow year-round. Other creeks flow intermittently, either gaining water from or losing it to the county's extensive groundwater system. The major groundwater

aquifers are the White River, Arikaree, and Ogallala formations. No natural lakes exist in Laramie County. However, several reservoirs have been constructed to supply Cheyenne with municipal water.

The scarcity of water is indicated by intense competition between industrial, agricultural, and municipal users for available as well as potential supplies. Irrigated lands are worth nearly \$1500 per acre (Casper Star Tribune, 7/20/82), while comparable, nonirrigated property sells for only \$712 per acre. Projected municipal water consumption prompted the City of Cheyenne to tap the flow of the other side of the Continental Divide for new supplies. Plans to expand supplies from that source (Stage II) were recently approved by voters, but still face additional court challenges. The \$60 million project approved by voters in April, 1982 is a scaled-down version of a plan rejected by voters in September of 1981.

THE PEOPLE

The county's 1980 population of 68,649 (second largest in Wyoming) is up 21.8 percent from 1970 Census count of 56,360. A change in the age structure (Figure 14) from 1970 to 1980 is also apparent. Most noticeable is the increase in the 0-4 and 15-34 age groups, and the decrease in the 5-14 age group. Approximately 58 percent of the increase in population of 12,289 from 1970 to 1980 is due to a surplus of births over deaths, with the remaining 42 percent due to net immigration. From 1970 to 1980, marriages (+40.6%) and divorces (+66.2%) grew faster than the population. Births (+15.0%) and deaths (+11.3%) increased more slowly than the population. Food stamp and AFDC recipients increased 58.7 percent and 21.7 percent respectively from 1972 to 1980, both more rapidly than the 1972-1980 population growth rate of 15.4 percent. The combined effect of inflation and added recipients increased AFDC payments by 119.3 percent from 1972 to 1980.

THE ECONOMY

Total personal income (Table 14) increased 211.7 percent from 1970 to 1980. Sectors increasing their share of Laramie County's economy include Construction, Manufacturing, TCPU[†], and Retail Trade. TCPU had the largest increase. Farming and the Federal Government were sectors which showed decline in their share of total personal income. The remaining sectors were virtually unchanged. In 1980, Laramie County's largest sectors were Government, TCPU, and

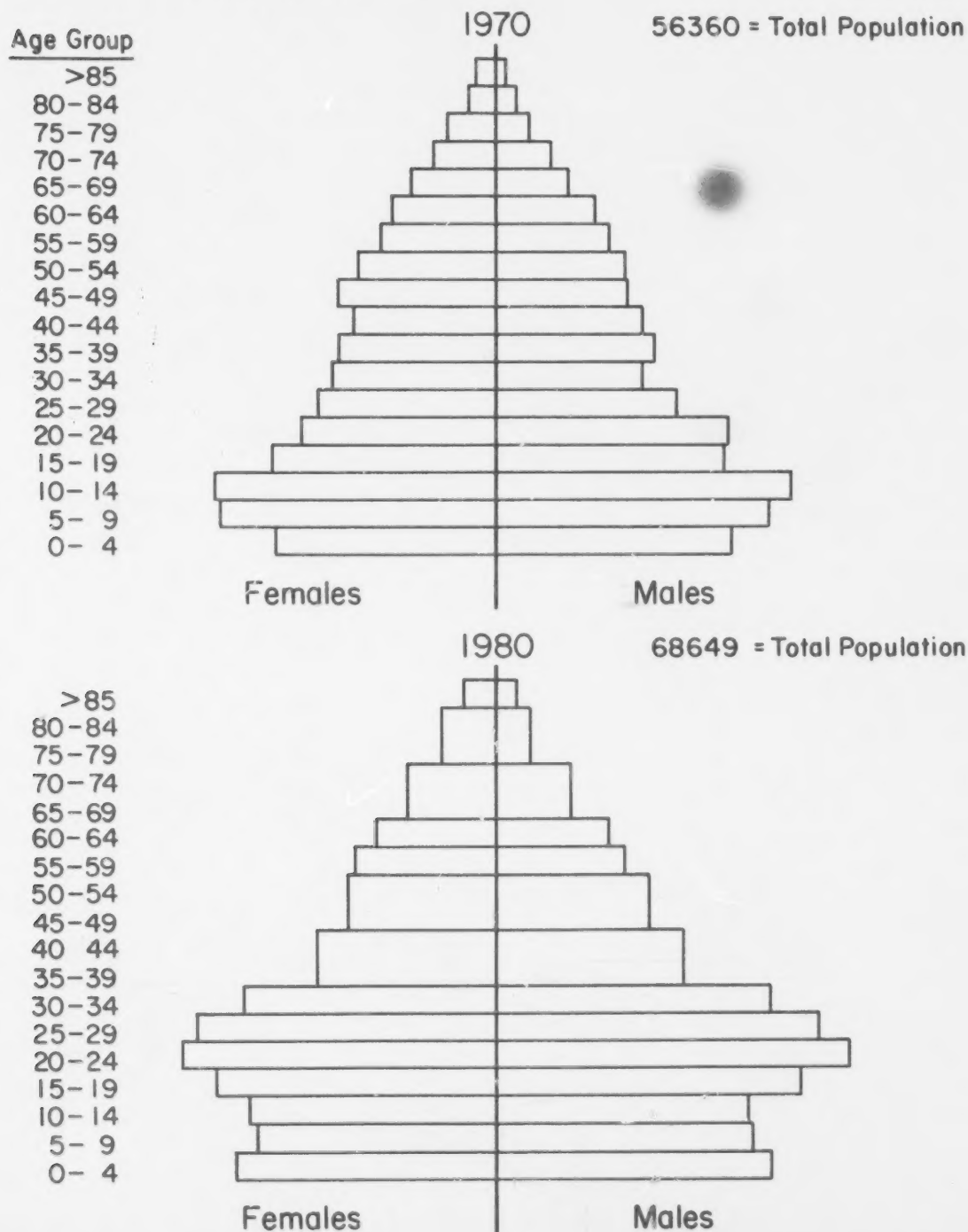
Table 14: Personal Income by major Source (Thousands of Dollars)*

Source	Wyoming 1980		Laramie County 1980		Laramie County 1970	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	99980	2.46	4168	.73	4079	2.22
Ag Serv., For., Fish and Other	13143	.32	1003	.18	303	.16
Mining	1015626	24.99	4827	.84	1458	.79
Construction	464577	11.43	51153	8.93	11782	6.41
Manufacturing	196636	4.84	30852	5.39	8702	4.74
Transportation & Public Utilities	415770	10.23	111579	19.48	26749	14.56
Wholesale Trade	193476	4.76	21188	3.70	6127	3.33
Retail Trade	382244	9.41	58554	10.22	17737	9.65
Finance, Insurance & Real Estate	137457	3.38	27206	4.75	8425	4.59
Services	458014	11.27	70672	12.34	23390	12.73
Government	687257	16.91	191510	33.44	74973	40.81
Federal	196976	4.85	93253	16.28	42857	23.33
State and Local	490281	12.06	98257	17.16	32116	17.48
Total	4064180		572712		183723	

* REIS Data

Services. Together those three sectors accounted for 65.3 percent of Laramie County's personal income. Mining, which accounts directly for 25 percent of Wyoming's personal income, brought in less than 1 percent of Laramie County's 1980 income. The largest private employers are listed below.

Figure 13: Laramie County; Age by Sex in 5-year Age Groups, 1970, 1980



<u>Major Employers</u>	<u>Product</u>	<u>Emp.</u>
Union Pacific	railroad	1,000
AMF Wyott	foodserv., equip.	300
Wycon Chemical	fertilizers	250
Husky Oil Refinery	petroleum	250
Ideal Aerosmith	precision instr.	100
Stanley Structures	prestress concrete	100
Tri-State Steel	steel fabr.	100
Westguard Indust.	livestock corral equip.	50

[Source: 1980 Community Profile, DEPAD]

✦ Transportation, Communications, and Public Utilities

Laramie County's per capita personal income (PCI) stood at \$10,916 in 1980, ninth among Wyoming's 23 counties, and just above the state PCI of \$10,875. Laramie County's 1970 PCI of \$4,039 was 7th in the state, and also slightly higher than the statewide PCI of \$3,815.

With attractions such as Frontier Days, and its location including the intersection of Interstate Highways 25 and 80, tourism is assured a major role in Laramie County's economy. The cyclical nature of employment, lodging's tax receipts, and gasoline sales data, with sharp peaks occurring in the third quarter of each year, is evidence of that fact.

OUTLOOK

As home to the state capitol and Wyoming's second largest city, Laramie County seems assured of continued growth. State and federal government agencies are expanding their staffs to serve Wyoming's growing population and oversee development of the state's fossil fuel and mineral resources. Energy companies pursuing development of reserves throughout Wyoming are locating headquarters or branch offices in Cheyenne. Former Governor Stan Hathaway has predicted that Wyoming will soon be the nation's top energy producing state.

However, substantial uncertainty exists about the outlook for Laramie County's rate of growth. Rumors persist that the Reagan Administration is planning to locate the first MX missiles at Warren AFB. Hardening of the existing Minuteman Silos, and installation of the new missiles would produce a substantial, temporary economic stimulus, and an additional demand on already inadequate water supplies. The eventual fate of Stage II and Stage III water projects will also affect the county's growth. Many of those uncertainties could be at least partially resolved in the near future.

Natrona County Profile

by Ruth Tebbutt

PHYSICAL CHARACTERISTICS AND CLIMATE

Natrona County encompasses approximately 5,184 square miles in central Wyoming. The county is bordered on the north by Johnson and Washakie Counties, on the east by Converse County, on the south by Carbon County, and on the west by Fremont County (Map 2).

Sculptured by strong winds and intermittent streams flowing into the North Platte River, Natrona County primarily consists of plateau land and rolling plains. Also part of the topography are sections of the Great Plains, Middle Rocky Mountains, Wyoming Basin, and the

Southern Rocky Mountains. Elevations vary from 9,109 feet above sea level in the Big Horn mountains to 4,700 feet at the point where Salt Creek enters Johnson County. In the southeast corner of the county, Casper Mountain marks the northernmost extension of the Laramie Mountain Range. The Big Horn Mountains dominate the northwest corner.

The mountains to the west and northwest provide a barrier to the Pacific storm fronts, rendering a dry climate in Natrona County. Precipitation is light, ranging from less than seven inches in the west central part of the County to almost 15 inches in mountain areas. The Casper Weather Station reports an average annual precipitation of 11.28 inches. Mountain slopes on the eastern border of the County contribute to less severe winters relative to western parts of Wyoming. Average temperatures are in fact higher than in any other area of the state, with mean monthly temperatures ranging from a low of 25 degrees in January to the low 70s in July and August.

Winds come mainly from the southwest and west-southwest at an average of 13 miles per hour. Wind gusts greater than 50 miles per hour are sometimes recorded; 81 miles-per-hour gusts were reported in March 1956.

HISTORY

Periods of geologic history occurring in central Wyoming are important to note because of their contribution to Natrona County's present economy. Shallow bodies of water created by heavy rainfall and mild temperatures, along with dense, prehistoric vegetation, resulted in the formation of coal beds and reservoirs of oil. The accumulation of uranium ores developed with the presence of oligocene rocks containing volcanic ash.

Nomadic Indian tribes (Arapaho, Crow, Shoshone, and Sioux) used the area of Natrona County as hunting grounds for many centuries. The first recorded visit by white men was in 1812 when Robert Stuart, simply passing through the area, was forced to stop by an early winter storm and built the first cabin in Wyoming. Drawn by the North Platte, both as a source of water and a guide, the area became a main thoroughfare for such early explorers as John Colter, General Ashley, and Captain Bonneville.

Present day development began in the 1850s when the Mormons established a ferry across the Platte River for homesteaders heading westward. The Mormon Ferry, near what is now Casper,

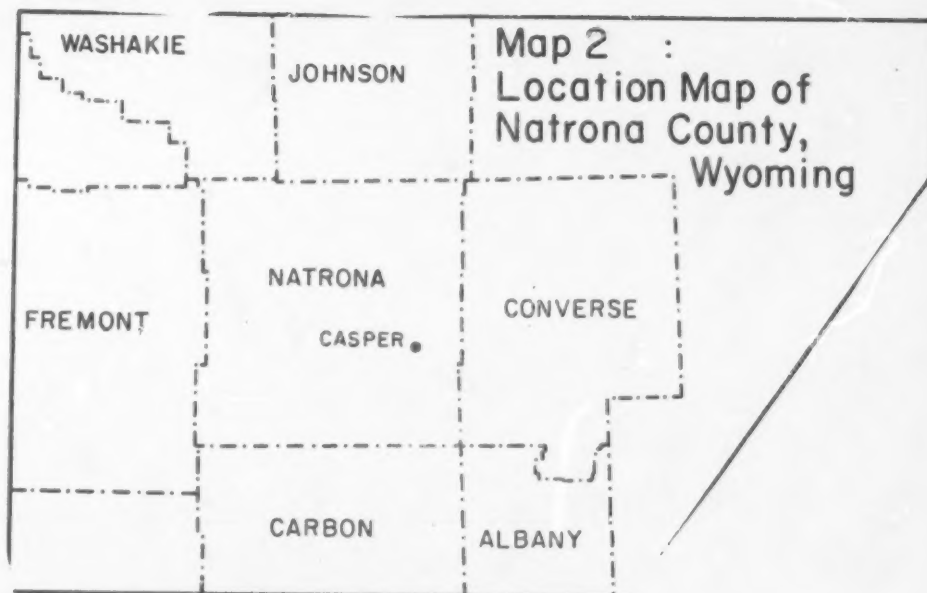


Table 15: Natrona County Profile
Calendar Years

46

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
1. Births (03) ¹	998.	909.	926.	889.	929.	916.	1084.	1191.	1350.	1484.	1559.	1655. ¹
2. Deaths (03) ¹	402.	424.	434.	395.	461.	396.	463.	426.	450.	373.	387.	424. ¹
3. Divorces (03) ¹	420.	490.	490.	499.	506.	575.	545.	625.	658.	760.	861.	863. ¹
4. Marriages (03) ¹	647.	721.	763.	773.	758.	759.	795.	853.	994.	982.	1034.	1111. ¹
5. Oil Production (26) ²	130980.	INA	127668.	156943.	142577.	110544.	89227.	81162.	77282.	75388.	69760.	57000. ²
6. Valuation of Oil Production (10)	411883.	INA	431646.	691881.	1014309.	718466.	615982.	576791.	578057.	696942.	1109950.	INA
7. Natural Gas Production (20)	87614.	INA	57707.	74231.	81491.	70204.	62592.	52593.	79922.	81993.	64342.	70000. ²
8. Valuation of Natural Gas Production (10)	13341.	INA	9222.	9269.	12540.	13432.	14218.	21617.	62071.	106949.	124769.	INA
9. Bentonite Production (11)	0.	61471.	53459.	52684.	44293.	47305.	32717.	36834.	84671.	50898.	18178.	30000. ²
10. Uranium Production (11)	302722.	276787.	250040.	424147.	285321.	165614.	150826.	60508.	229792.	474255.	310837.	300000. ²
Fiscal Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
11. AFDC Grants (03)	INA	INA	5226.	5360.	6818.	6438.	6176.	5554.	4700.	4421.	4824.	5220.
12. Food Stamp Recipients (03)	INA	1438.	1807.	1875.	1873.	1764.	1530.	1246.	1032.	1038.	1598.	2095.
13. AFDC Payments (05)	INA	INA	810815.	862206.	1161979.	1056831.	1098010.	1080868.	947715.	1018242.	1261472.	1409651.
Calendar Quarters	3/79	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82
14. Civilian Labor Force (03)	38104.	38411.	36710.	38532.	39740.	40895.	37560.	41558.	42565.	42738.	42659.	44955.
15. Employment (03)	37407.	37402.	35636.	37368.	38500.	39619.	36123.	40149.	41401.	41432.	41203.	42951.
16. Unemployment (03)	697.	1008.	1073.	1165.	1241.	1275.	1437.	1408.	1164.	1305.	1456.	2004.
17. Unemployment Rate (02)	1.8	2.6	2.9	3.0	3.1	3.1	3.8	3.4	2.7	3.1	3.4	4.5
18. Hotel, Motel & Camp Sales & Use Tax (05)	206334.	140658.	188703.	203400.	181297.	179994.	162397.	228029.	238451.	202535.	205030.	199775.
19. Net Collections, Sales & Use Tax (05)	6718439.	9105174.	11286305.	13557143.	12825982.	12681657.	12304740.	14303013.	13876174.	15015119.	15929620.	14396979.
20. Liquor Sales (05)	1025108.	1623377.	1130325.	1270649.	1346245.	1955728.	1180971.	1436887.	1462602.	2025412.	1398407.	1472506.
21. Gasoline Gallonage (22)	12736537.	12767703.	10006705.	11815951.	12522397.	11418458.	9930641.	11720899.	11828194.	11842931.	9864294.	11175362. ³
Calendar Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
22. Population* (03)	51264.	52000.	52700.	52200.	52600.	54800.	57100.	59800.	63500.	66500.	71856.	INA
Fiscal Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
23. State Board of Equalization Valuations (08)	64172.	60935.	63804.	63210.	90908.	123554.	95633.	87906.	86614.	96033.	117171.	164910.
20. Locally Assessed Property Valuations (08)	81094.	84398.	84892.	84246.	88941.	89894.	112092.	124879.	131807.	150223.	163971.	179214.
21. Cigarette Tax Dist. (05)	377051.	396222.	411089.	454318.	424048.	437110.	475119.	490442.	527855.	557211.	596425.	614225.

¹Provisional data from the Wyoming Department of Public Health, Division of Vital Statistics

²Projections by the Department of Economic Planning and Development.

³Estimate based on trend and April data.

*1971 through 1979 are estimates made by the U.S. Bureau of the Census, not actual counts as in 1970 and 1980.

Figure 13: Natrona County On-Line Data Base

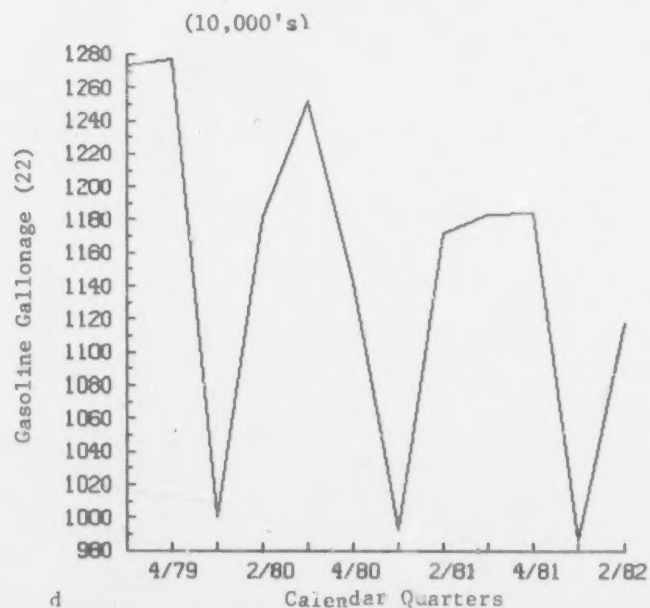
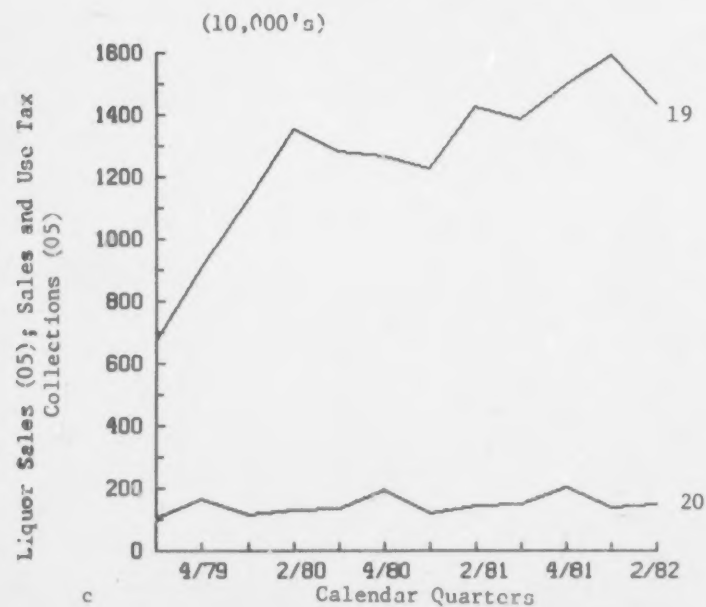
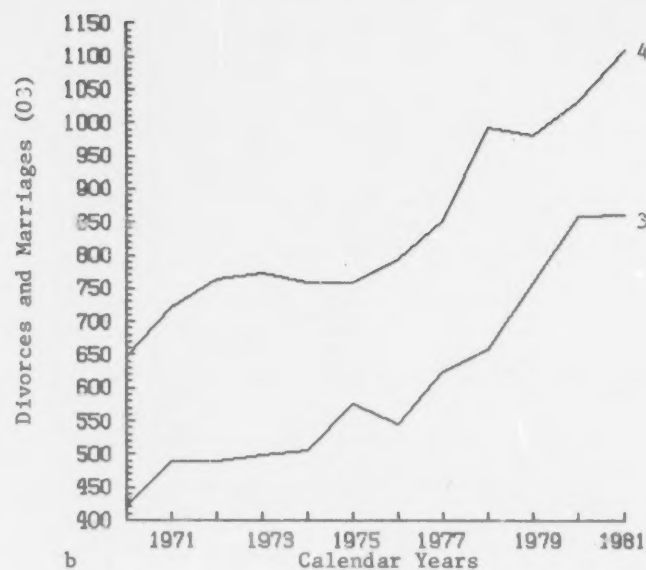
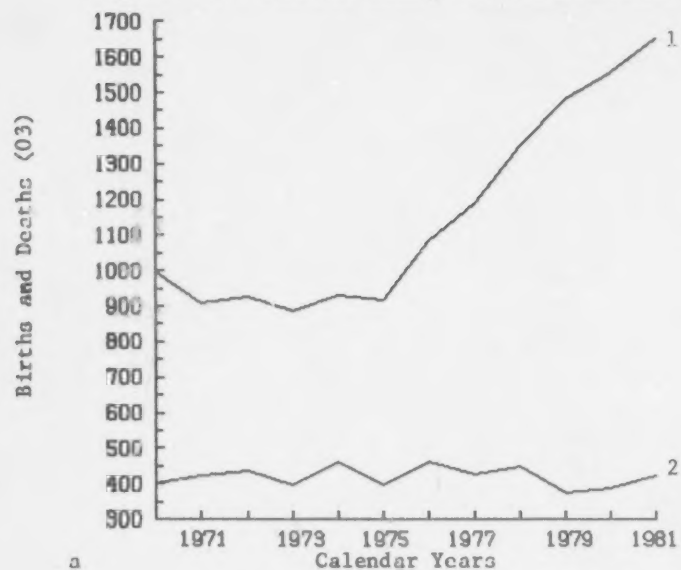
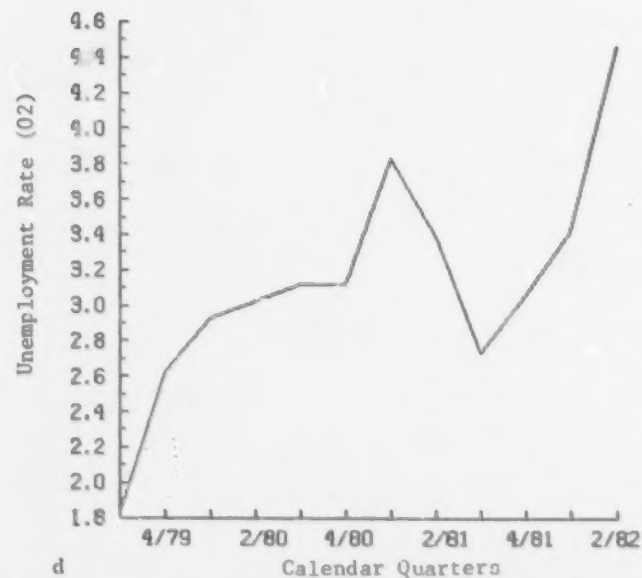
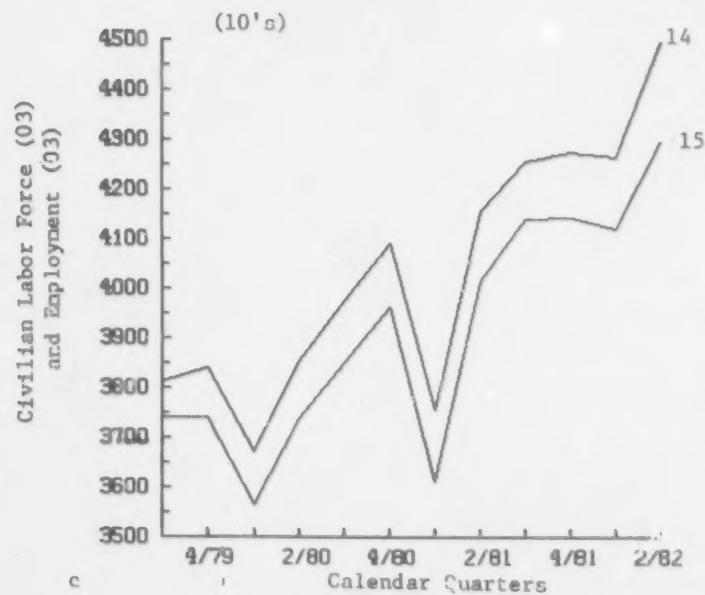
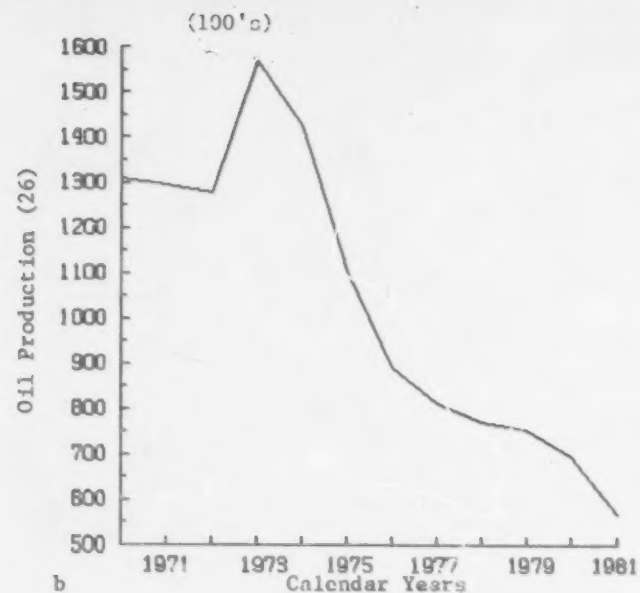
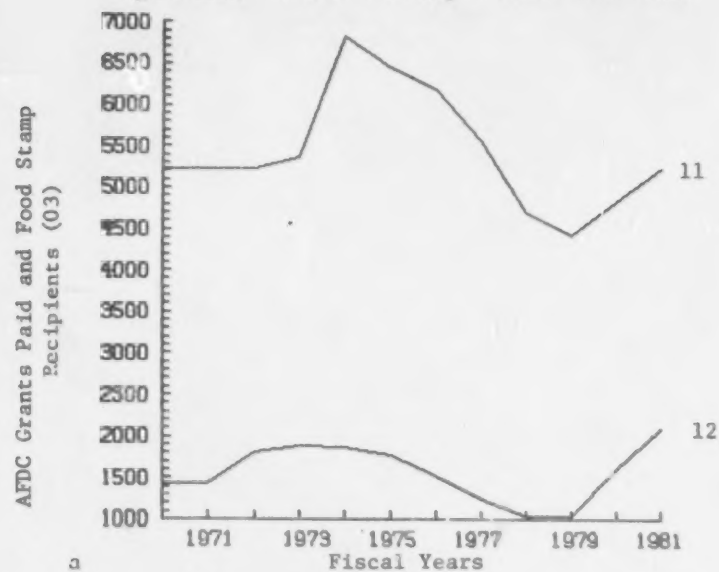


Figure 192: Natrona County On-Line Data Base

48



influenced the creation of Fort Caspar and consequently the site of the city, founded in 1888. The present spelling, Casper (spelled with an "e"), was the result of a typographical error on the original plot map.

Natrona County was at one time part of Carbon County, one of the original five counties in Wyoming. In 1890, Governor Warren appointed commissioners to organize "Natrona County." It became named for the deposits of natrium, or sodium carbonate, found in the area.

With the advent of railroads by 1890, Natrona County's economic history began. Railroads entered the area and cattlemen developed cattle "empires." A large sheep ranching industry was built up by sheepmen attracted by the arid climate, and soon sheep ranked with cattle as a major industry. Casper, like several other cities, formed as an agricultural center.

Oil activity in the county began in the late 1880s, and in 1885 the first refinery was built. Of particular economic benefit from 1912 to the present was the development of the Salt Creek Oil Field, located around the towns of Midwest and Edgerton. Salt Creek is cited as being "the greatest single pools of high grade oil found in the United States." In 1922, the Standard Oil Refinery in Casper was operating, processing 45,000 barrels of crude oil a day.

A central geographic location has helped Casper develop into a center of distribution and service to the oil industry. Claiming the title "Oil Capital of the Rockies," virtually every major oil company in the United States maintains an office in Casper.

Other developments significant to Natrona County's economic growth include: (1) Construction of several large reservoirs and power projects over the past three decades--the Pathfinder and Alcova dams and the Kendrick Project have held to a supply of low-cost power and favorable irrigation conditions--and (2) discoveries of uranium and various minerals resources.

NATURAL RESOURCES

Fossil Fuels

Natrona County has historically played an important role in Wyoming's oil and gas development. In 1851, the county's petroleum related history began when a group including Jim Bridger, Kit Carson, and Cy Iba extracted oil from an oil seep on Poison Spider Creek, west of Casper, mixed the oil with flour and sold it for use as axle grease. It wasn't until 1889, however, that M.P. Shannon and associates from Pennsylvania drilled the first successful oil well in Natrona, just north of what is now the Salt Creek Field. Production was not very significant. Finally, in 1908, H.E. Stock drilled the first commercial well on the Salt Creek Field. Construction of oil refineries and pipelines in the area accelerated production from Salt Creek, and by 1923 production peaked at 35,301,608 barrels, representing 5 percent of the total U.S. production for that year. Another successful petroleum reserve, which together with Salt Creek spurred exploration in the county, is the U.S. Naval Petroleum Reserve Number 3, or Teapot Dome, as it is more commonly known. (The history behind Teapot Dome adds to the colorful events leading to the development of oil and gas in Natrona County, but is unfortunately beyond the scope of this text.) Important discoveries included North and South Casper Creek Fields (1925 and 1919), Cole Creek Field (1938), Grieve Field (1954), Waltman Field (1959), and Frenchie Draw (1961).

The Salt Creek Oil Field continues to produce, dominating the trend of the county's oil production. Unfortunately, Salt Creek has been declining steadily in oil production over the past several years. Oil production in Natrona County declined faster than anywhere else in the state in 1980, down 563,000 barrels from 1979. Salt Creek, when the decontrol of crude oil pricing pushed the price per barrel up over \$30, did however, help to boost the county's 1981 total mineral production to \$258 million, doubling 1980's figure.

The Mineral Division of DEPAD predicts that it is unlikely that valuation will continue to rise at such a rate, partly because Natrona County's oil production will continue to decline.

In terms of gas production, once again Salt Creek Field historically carried the county's production; however, over the years the field's gas was reinjected to improve oil production, and by 1974 Salt Creek stopped producing gas. Table 15 shows the fluctuation in the County's gas production: increased production from West Poison Spider, Waltman, and Frenchie Draw fields in 1973, 1974, and 1975, a drop in production from these fields in 1975 and 1977; and another upswing beginning in 1978 resulting from deeper drilling in Waltman Field. Natrona saw another decline in natural gas production in 1980. The 1980 figure shows the affects of a drilling slump due to low oil prices and high interest rates. Current (1980) valuation of natural gas production marks a 16.66 percent increase over 1979 valuation.

It is predicted that emphasis in production will eventually change from oil to gas, but with oil still retaining its role of importance. This trend can be seen in the oil and gas production figures in Table 15. Also, taking into consideration that Natrona has been explored specifically for oil since the late 1800s, most of the future discoveries will be gas.

Minerals

Minerals that are currently in production in Natrona County are uranium, bentonite, sodium sulfate, sand and gravel.

The important commercial uranium deposits of Natrona are confined to Union Carbide's mines within the Gas Hills mining district on the west-central edge of the county. Uranium production decreased in 1981--10,837 short tons under 1980 production and 174,255 short tons below the period that uranium production peaked in 1979. The future of the uranium industry in Natrona is uncertain pending an upswing in uranium market conditions.

Bentonite is mined on numerous sites in the county and is processed in Casper. Bentonite decreased substantially to 18,000 tons in 1980. Both Benton Clay Company and the Kaycee Bentonite Partnership operate mines in Natrona.

Since the Swigart Mine closed in 1945, there has been no coal mining in Natrona County. Natrona does, however, have some deposits of coal which are found in the Wind River and Powder River coal basins. At the present time, coal mining is not expected to resume. Other mineral deposits found in Natrona County, but of no immediate commercial value, include manganese, beryllium, and titanium.

Water

Natrona County contains over 17,000 acres of surface water, the fifth largest amount in the state. Most of this is found in the southern and central areas of the county. The North Platte River, including one of its larger tributaries, the Sweetwater, is controlled by Pathfinder and Alcova Dams in Natrona County. Pathfinder Reservoir is Natrona's largest impoundment of water. Alcova Reservoir provides irrigation water to approximately 23,000 acres of land within the Kendrick Project just west of Casper.

Important water resources along the county's northern edge are located underground. Development for household and irrigation use has been limited due to the presence of significant amounts of toxic minerals.

THE PEOPLE

The recent population figure available from the Census Bureau shows a 1980 population of 71,856 for the County. Even with a 40.17 percent increase over 1970 population data, Natrona County remained sparsely populated at 13.45 persons per square mile, with most of the people being concentrated in a few areas: Casper contained 71.0 percent of the county's total population; Evansville and Mills, located directly outside Casper, had recorded percentages of 3.69 and 2.98, respectively. Understandably, growth is most evident in the urban population. This is largely due to the fact that Casper acts as a regional "service center" for much of the state.

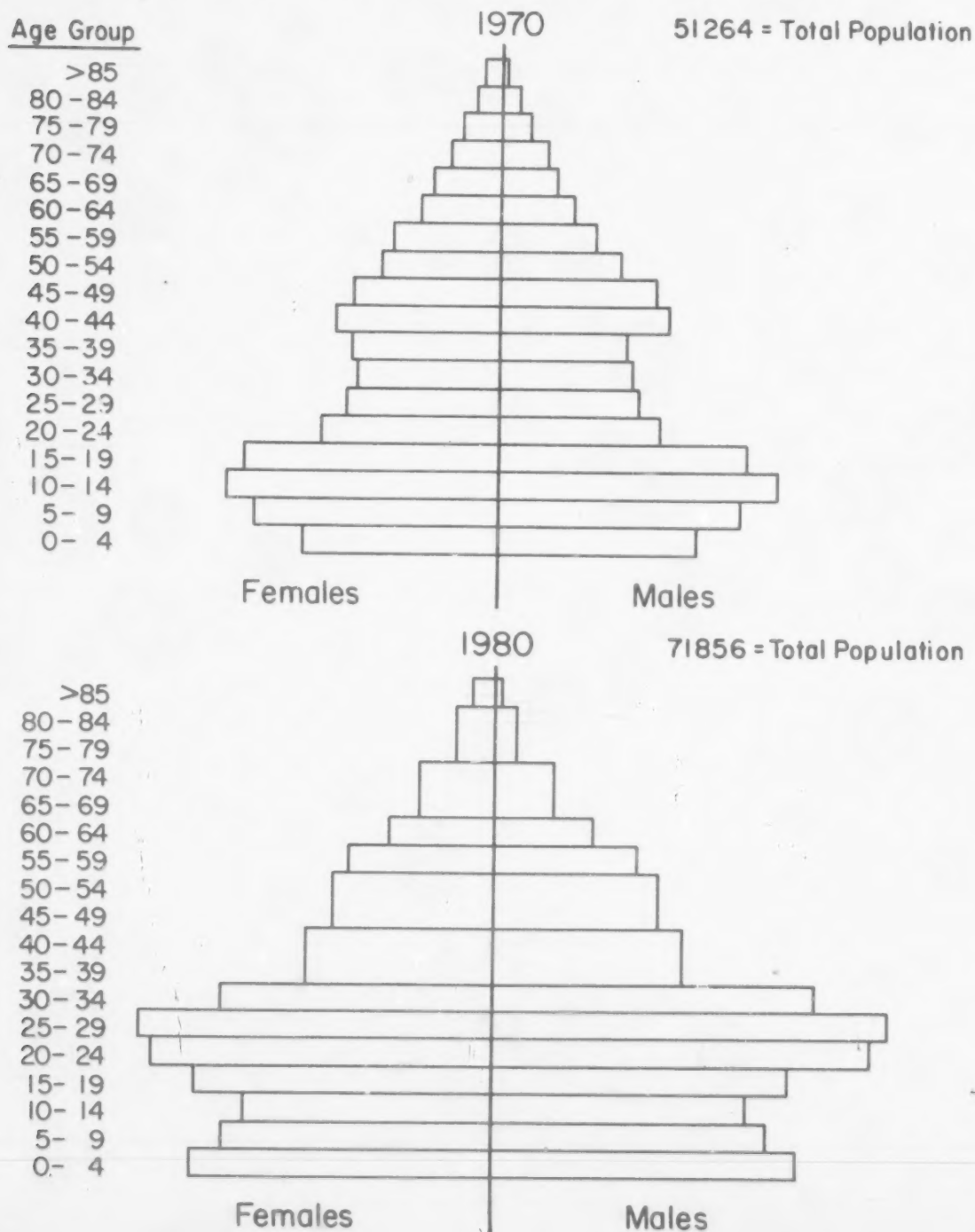
Population growth has changed the age profile of Natrona in the past 10 years. The median age range has increased from 10-14 years in 1970 to 25-29 years in 1980. It is interesting to note that when compared with the other age groups, those aged 10-14 showed the largest decrease (-8.55 percent) from 1970 to 1980, while those in the 25-29 years range increased 153.36 percent, marking the highest increase among all age groups. Other significant increases can be seen in the prime working age ranges of 20-24 years and 30-34 years.

An estimated 1,231 persons were added to Natrona County's population during 1981 as a result of natural increase, the excess of births over deaths. The number of births grew 82.07 percent, a higher percentage than the population growth, from 1971 to 1981. The number of deaths remained fairly constant over the same time period, with a 9.56 percent increase between 1980 and 1981. Marriages and divorces have both increased steadily at low rates during the years presented in Table 15. Marriages rose 7.45 percent in 1981 over 1980. A .23 percent increase in divorces occurred from 1980 to 1981.

ECONOMY

Boasts heard during the early stages of the nationwide recession that Natrona had a recession-proof economy seem to be a thing of the past. Indications that this is true are seen in public assistance and employment data. A record 2,095 persons received food stamps in Natrona County in 1981. While the 1981 number of AFDC grants paid didn't reach the top figure of 1974, it still marked increases of 11.06 percent, 18.07 percent, and 8.21 percent over the years of 1978, 1979, and 1980, respectively.

Figure 15 : Natrona County; Age by Sex in 5-year Age Groups, 1970, 1980



Widespread layoffs increased the number of unemployed persons in the second quarter of 1982 to 4.24 percent above 1/82 and 6.98 percent above a year ago. Natrona County's unemployment rate for 2/82 was 4.5 percent, compared with 3.4 percent the quarter earlier as well as a year earlier. While the number of persons employed in 2/82 rose 4.24 percent above 1/82, the civilian labor force showed a 5.38 percent increase. Although the figures do not indicate how many of the unemployed previously worked in oil or oil-related fields, reports on the reduction of rig activity have assuredly had an affect on the labor market.

The oil business slump poses still another potential problem when it is considered that the mining industry is Natrona County's major source of income (see Table 16).

Table 16: Personal Income by Major Source (Thousands of Dollars)*

Source	Wyoming 1980		Natrona County 1980		Natrona County 1970	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	99980	2.46	3103	.38	3874	2.15
Ag Serv., For., Fish and Other	13143	.32	847	.10	286	.16
Mining	1015626	24.99	206500	25.30	33455	18.59
Construction	464577	11.43	84935	10.40	13743	7.64
Manufacturing	196636	4.84	50170	6.15	16361	9.09
Transportation & Public Utilities	415770	10.23	67129	8.22	16957	9.42
Wholesale Trade	193476	4.76	D#	--	12853	7.14
Retail Trade	382244	9.41	73525	9.01	19028	10.57
Finance, Insurance & Real Estate	137457	3.38	37396	4.58	7913	4.40
Service	458014	11.27	D#	--	26039	14.47
Government	687257	16.91	85622	10.49	29464	16.37
Federal	196976	4.85	20398	2.50	9020	5.01
State and Local	490281	12.06	65224	7.99	20444	11.36
Total	4064180		816303		179973	

* REIS Data

Not shown to avoid disclosure of confidential information, data are included in totals

The economy of Natrona County and Casper became less diversified in 1980. Growth in the mining industry, which includes oil and gas extraction and services, between 1970 and 1980 affected the diversification of major sources of personal income present in 1970. In 1970, the county saw a balance of industry, government, services, retail trade and wholesale trade. Personal income from mining in 1980 was \$207 million, or 25.30 percent, of the total income generated in the county. This dollar amount represents \$122 million more than what was produced from government, another basic sector of the economy which generates the second highest percentage of Natrona County's income. Construction captured the third largest percentage of total income generated in 1980.

OUTLOOK

Natrona County is in somewhat of an uncertain situation since oil production within the county is currently declining, while population is increasing at a fairly steady rate. Increased unemployment and public assistance as well as a decrease in sales activity, indicated by sales tax collections, have been the immediate consequences of this condition.

Despite this bleak picture, there is a brighter outlook. Natrona County has characteristics and opportunities to keep the current oil business slump from having a drastic affect. To begin with, there are signs that oil prices are stabilizing and that interest rates may improve. This would encourage investments in exploration drilling and provide a boost to Natrona's oil market. There are also indications that the county's production emphasis is changing to other mineral resources. Natural gas production is increasing, and DEPAD predicts bentonite output to reach 100,000 tons per year by 1985. Another outstanding factor for the economy and growth of Natrona County is its geographic location, serving the state as a regional "service center."

Key to Units Code

01 THOUSAND BOARD FEET	17 AVERAGE DAILY NUMBER OF VEHICLES
02 PERCENTAGE	18 MILLION MILES
03 NUMBER OF INDIVIDUALS	19 FATALITIES PER MILLION MILES
04 THOUSAND KILOWATT HOURS	20 THOUSAND CUBIC FEET
05 DOLLARS	21 KILOWATT HOURS
06 MILLIONS OF DOLLARS	22 THOUSANDS OF GALLONS
07 BILLIONS OF DOLLARS	23 VISITOR DAYS USE
08 THOUSANDS OF DOLLARS	24 NUMBER OF INDIVIDUAL CRIMES REPORTED
09 NUMBER OF HOUSEHOLDS	25 HUNDREDS OF THOUSANDS OF DOLLARS
10 HUNDREDS OF DOLLARS	26 HUNDREDS OF BARRELS
11 SHORT TONS	27 HUNDREDS OF MCF
12 THOUSAND SHORT TONS	28 \$ PER TON
13 MILLION CUBIC FEET PER DAY	29 \$ PER MCF
14 THOUSAND BARRELS PER DAY	30 \$ PER BARREL
15 INDIVIDUAL VISITORS	31 VEHICLE
16 GALLONS	32 HUNDREDS OF INDIVIDUALS

Bibliography

I. Page 9 Table 1:

A. Series 1, 2, 5, 6
U.S. Department of Energy.
Energy Data Reports. Mining and
Minerals: Gas and Coal. U.S.
and WY. Gas data are in a monthly
publication, U.S. and WY. coal is
a monthly publication.

B. Series 3, 4
The Oil and Gas Journal. US Oil
and Wyoming Oil Production.
Weekly publication.

II. Page 11-Table 2:

A. Series 1
United States Forest Service.
"Timber Cut and Sold Convertible
Products." Timber cut in Forest
Service, Regions 2 and 4. Wyoming
National Forests. Quarterly.

B. Series 2-15
Wyoming Crop and Livestock
Reporting Service. Bi-Weekly
Ag Statistics. U.S. and Wyoming
Crop, Livestock and Commodity
prices. Prices received and paid
by U.S. Farmers and Ranchers.
Reporting monthly.

III. Page 13-Table 3:

A. Series 1-6
Monthly Visitor Use Reports.
Data received from Park Service.
Parks and Monuments Covered:
Bighorn, Devil's Tower, Fort
Laramie, Fossil Butte, Grand
Teton, and Yellowstone. Monthly
Reports.

B. Series 7 Traffic Survey Unit - Planning
Branch Wyoming State WY. High Department.

"Selected Recording Stations Traffic Counter
Data." Published Monthly.

C. Series 8
Sales and Use Tax Summary by County, Hotel,
Motel, and Camp Sales Tax Collections. Wyoming
Dept. of Revenue, Sales and Use Tax Division.
Published Monthly.

D. Series 9
Petroleum Association of Wyoming. The Gasoline
Gallage Report. Gasoline consumption by
county.

IV. Page 15-Table 4: Employment Security
Commission of Wyoming. Labor Force Trends,
published quarterly.

V. Page 12-Table 5

A. Series 1-3
Secretary of State. New and Foreign
Corporations. Monthly Report.

B. Series 4-6
Cheyenne Credit Bureau. Wyoming bankruptcy
cases, business failures, and value of failures.
Weekly publications.

VI. Page 19-Table 6:

A. Series 1-3 F.W. Dodge Division of McGraw
Hill. "Dodge Construction Potential," Wyoming
nonresidential and residential construction data.
Published Monthly.

B. Series 4, 5
Institute for Policy Research. "Local
Construction Reports." Survey of authorized
construction in selected cities. Received
monthly.

VII. Page 21-Table 7:

A. Series 1-8

Reports to IPR from selected electrical companies doing business in Wyoming. Residential, Industrial, Commercial, and Agricultural, Municipal, and other public electric usage and connections. Monthly.

B. Series 9-16

Reports to IPR from selected gas companies doing business in Wyoming. Residential, Industrial, Commercial, and Agricultural, Municipal, and other public natural gas usage and connections. Monthly.

C. Series 17-18

Reports to IPR from telephone companies doing business in Wyoming. Business, private and total telephone connections. Monthly.

VIII. Page 23-Table 8:

A. Series 1, 2

R.L. Polk and Co. Motor Statistical Division. "National New Vehicle Registration Service." New Truck Registration in Wyoming, New Car Registration in Wyoming. Reported Monthly.

B. Series 3, 5

Business Week. United States Personal Income, Wyoming Personal Income. Reported Monthly.

C. Series 4, 6, 7 Dept. of Commerce, Bureau of Economic Analysis. Survey of Current Business, Current Business Statistics. Consumer Price Index, U.S. Disposable Personal Income. Reported Monthly.

D. Series 8

Wyoming Liquor Commission Sales Data, reported to IPR. Received Monthly.

IX. Page 29-Table 9

A. Series 1-5

Crime in Wyoming, Uniform Crime Reporting Center, Center for Criminal Registration in Wyoming. Reported Justice Research, Division of Criminal Identification, Office of the Attorney General. Published Quarterly.

B. Series 6

Wyoming Dept. of Revenue and Taxation Sales and Use Tax Division. "Net Collections by Business Class by County." Published Monthly.

C. Series 7

Annual Report of the Office of the State Auditor. General Fund Cash Balance. Fiscal year report.

X. Page 33-Table 10

A. Series 1-6

Wyoming Department of Education, Abstract Reports.

B. Series 7-10 University of Wyoming, "Annual Statistical Summary of the Division of Admissions, Registration, and Records. Published yearly.

XI. Page 35-Table 11

A. Series 1-6

U.S. Department of Health and Human Services, Office of Health Research, Statistics, and Technology. "Monthly Vital Statistics Report." Published Monthly.

XII. Page 30-Table 12

A. Series 1-4

Wyoming State Bank Examiner Report. Banking and Finance: Demand Deposits, Total Deposits, and Total Loans.

B. Series 5, 6

Federal Home Loan Bank of Seattle. monthly comparative statistical analysis of member institutions. Mortgage loans and savings in saving and loan associations. Data received monthly.

XIII. Page 38-Table 13

A. Series 1-4

Wyoming Department of Public Health, Division of Vital Statistics. "Vital Statistics." Yearly.

B. Series 5, 6, 19, 20

Wyoming Department of Revenue and Taxation. Fiscal year

Management Information and Statistical Report. Wyoming Division of Public Assistance and Social Services. Published Biannually.

J. Series 10-13

Employment Security Commission of Wyoming. Labor Force Trends. Published Quarterly.

E. Series 14

Sales and Use Tax Summary by County. Hotel, Motel, and Camp Sales Tax Collections. Wyoming Dept. of Revenue, Sales and Use Tax Division. Published Monthly.

F. Series 15

Net collections by Business Class by County. Wyoming Dept. of Revenue, Sales and Use Tax Division. Published Monthly.

G. Series 16

Sales by County-City. Wyoming State Liquor Commission. Published Monthly.

H. Series 17

The Gasoline Gallonage Report. Petroleum Association of Wyoming. Gasoline consumption by county. Published Monthly.

I. Series 18

Regional Economics Information System, Bureau of Economic Analysis. Population data included in table of "Personal Income by Major Sources."

J. Series 21

"Total Cigarette Tax Distributions to Wyoming Cities, Towns, and Counties." Annual Report of the Department of Revenue and Taxation, Ad Valorem Tax Division, Tax Distributions. Fiscal year report.

XIV. Page 46-Table 15

A. Series 1-4

Wyoming Department of Public Health, Division of Vital Statistics. "Vital Statistics." Yearly.

B. Series 5-10, 23, 24

Annual Report: Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal year report.

C. Series 11-13

Management Information and Statistical Report. Wyoming Division of Public Assistance and Social Services.

D. Series 14-17
Employment Security Commission of Wyoming. Labor Force Trends, published quarterly.

E. Series 18
Sales and Use Tax Summary by County. Hotel, Motel, and Camp Sales Tax Collections. Wyoming Dept. of Revenue, Sales and Use Tax Division. Published Monthly.

F. Series 19
Net Collections by Business Class by County. Wyoming Dept. of Revenue, Sales and Use Tax Division. Published Monthly.

G. Series 20
Sales by County-City. Wyoming State Liquor Commission. Published Monthly.

H. Series 21
The Gasoline Gallonage Report. Petroleum Association of Wyoming. Gasoline consumption by county. Published Monthly.

I. Series 22
Regional Economics Information System, Bureau of Economic Analysis. Population data included in table of "Personal Income by Major Sources. Published Yearly.

J. Series 21
"Total Cigarette Tax Distribution to Wyoming Cities, Towns, and Counties." Annual Report of the Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal year report.

Format

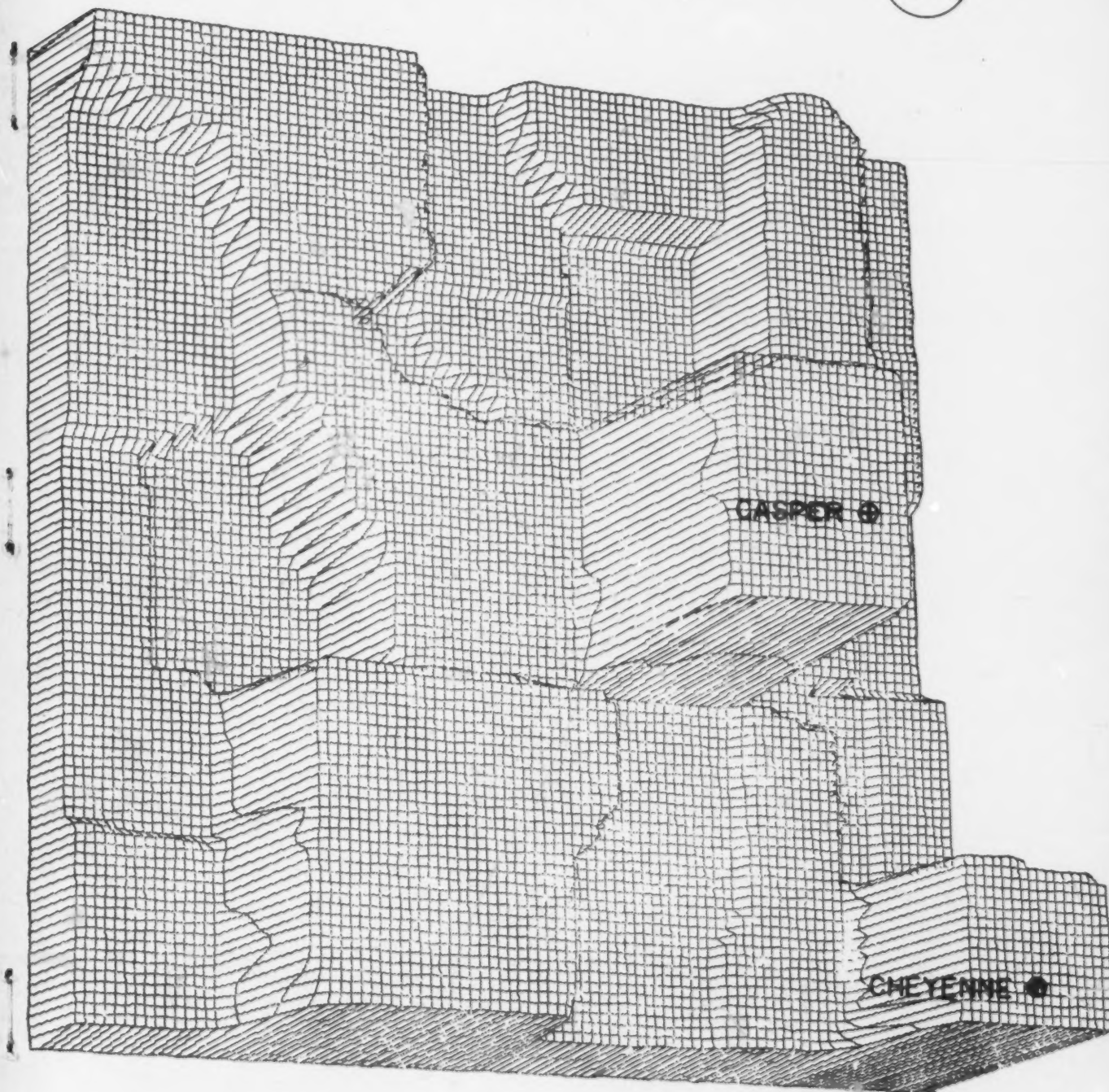
For data available at least quarterly, the last 12 quarters are printed in WQU. In this edition, published series begin with the 3rd quarter of 1979, and end with the 2nd quarter of 1982. For other data series (primarily annual), the most recent observations, up to 12, are published in WQU. Most annual data series will reappear in WQU only when updated, or about every fourth issue. Quarters are calendar quarters. For example, the 3rd quarter is composed of July, August, and September. In the table headings and narratives, a particular quarter will be indicated by notation such as 2/80 (2nd quarter, 1980), 1/80 (1st quarter, 1980), and so on.

Beside each data series name is a two-digit number in parentheses. The number is a data value units (such as dollars, tons, feet, miles, etc.) code. The key to the units code follows the last county profile page. Following the units code page is a bibliography of data sources, listed by WQU page number of the data.

Throughout WQU, all data are for the state unless otherwise stated. The most recent year's data should be viewed as preliminary, due to revisions. The acronym "INA" signifies that information is not available. Some graphics are used to illustrate trends. When more than one trend line appears on a graph, the line will be labeled with a number which matches the number of a data series on the accompanying table.

The reader should be attentive to the footnotes at the bottom of pages, particularly those accompanying a data table. The footnotes help the reader to properly interpret the data, and they also indicate when more detailed (by subject or by area) data than that which is shown is available from IPR.

WYOMING QUARTERLY UPDATE



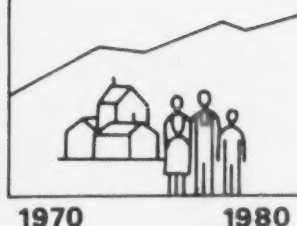
Percent of 1981 County Employment in Labor Unions

CRIS

Census Retrieval Information Service

P.O. Box 3925
Laramie, WY 82071
(307) 766-5141

Room 302
Emerson Building
Cheyenne, WY 82002
(307) 777-7504



U.S. Census information for Wyoming is handled by the Census Retrieval and Information Service (CRIS). CRIS issues printed reports of Wyoming Census data as well as handling specific requests. Much of the population and housing data from the 1980 Census is now available.

CRIS reports now available:

PRICE

- | | | |
|-----------|---|-----------|
| #82-9-2: | STF3, September 1982, 13 pages. List of tables available from STF3 tape. Partial labor force and income data for state, counties, and cities. | No Charge |
| #82-8: | <u>Age Distribution in Wyoming, 1980</u> , August 1982, 120 pages. Analysis of age profiles in 5-year brackets. | No Charge |
| Wyoming: | Comparison with USA and with 1970. Indications of net in-migration by age Prediction of 1990 peak at ages 30-34. | |
| Counties: | Maps of age distribution. Graphs of age profiles for each county. | |
| Cities: | Age profile for each city. | |
| #5: | STF1, October 1961, 54 pages. 100% count data, 1980 population and housing: state, counties and cities. | No Charge |
| #6: | Laramie People Patterns, January 1982, 11 pages. Minority distribution in Laramie by zoning and by age of neighborhood. | No Charge |

CRIS is a cooperative service provided by the Institute for Policy Research, University of Wyoming, and the Research and Statistics Division, Wyoming Department of Administration and Fiscal Control.

We are looking forward to assisting you in the future.

Judy Denison and G. Fred Doll
Institute for Policy Research
University of Wyoming

Phil Kiner
Research and Statistics Division
Department of Administration and
Fiscal Control

Wyoming Quarterly Update

Wyoming Quarterly Update (WQU) represents the efforts of the Institute for Policy Research (IPR) at the University of Wyoming to provide improved data access services. The data presented in WQU are assembled from secondary sources, such as government agencies and private industry. The staff of IPR greatly appreciates the ongoing cheerful cooperation of each of the data sources listed in the bibliography.

WQU provides current economic indicators and timely, easily accessible data. Most of the data published in WQU are updated quarterly with the most current numbers. The complete data sets from which WQU originates are maintained, together with documentation, in machine-readable form by IPR. Readers are encouraged to contact IPR to find out how to gain access to and use the on-line data system. Many data series, such as gasoline sales and taxation data, span more than 30 years. Numerous other series cover 20 years or more.

Efforts to expand the subject and geographic detail (county level data) of data sets will be made continuously. Featured for the fourth time in this edition are county profiles. Current data, graphics, and discussion are presented for Converse and Niobrara counties in this edition. Each subsequent edition of WQU will feature two to three county profiles. At that rate, each Wyoming county will be covered every two to three years. Current plans are to cover Platte and Goshen counties in the next WQU (March, 1983). No firm plans have been made to present particular counties in the July, 1983, WQU. Suggestions by readers will be considered in making that decision.

The cover page of each edition features a contour map which illustrates the geographic distribution of a particular variable. This edition features a contour map which contrasts the percentage of each county's employment which is in a labor union. The data range from 16.9 percent in unions in Natrona County to 0.6 percent in Niobrara County.

First-time readers of WQU should refer to the "Format" (last page) for an explanation of numerical codes and table formats.

For additional information, to make suggestions, or to request data, contact WQU project manager John Merrifield at:

The Institute for Policy Research
University Station, Box 3925
Laramie, WY 82071
(307) 766-5141

OTHER IPR SERVICES AND RESEARCH REPORTS ARE LISTED ON THE LAST PAGE OF THIS WQU.

* The University of New Mexico Bureau of Business and Economic *
* Research and Wharton Econometrics are co-sponsoring a Mountain *
* States Region Economic Outlook Conference on March 15, 1983 in *
* Albuquerque, New Mexico. Papers discussing the near and long- *
* term economic outlooks of Wyoming, Utah, Colorado, Oklahoma, *
* New Mexico, Nevada, and Arizona will be presented. Persons *
* interested in obtaining more information and perhaps attending *
* the conference should contact Brian McDonald immediately. He *
* can be reached by writing to him at the: Bureau of Business and *
* Economic Research, University of New Mexico, Albuquerque 87131, *
* or by calling (505) 277-3321. *



Table of Contents

Introduction	i
Table of Contents	ii
Wyoming Scene	1
Minerals Outlook	3
Agricultural Outlook	9
Special Feature	
EXPORTATION OF STATE AND LOCAL TAXES: A COMPARATIVE ANALYSIS	10
Energy and Mineral Production	
Figure 1a	16
Table 1	17
Figure 1b	18
Mineral Tax Data and Projections	19
Agriculture	
Figure 2	20
Table 2	21
Tourism	
Figure 3	22
Table 3	23
Employment and Labor	
Figure 4	24
Table 4	25
Business Conditions	
Figure 5	26
Table 5	27
Construction	
Figure 6	28
Table 6	29
Utilities	
Figure 7	30
Table 7	31
Consumers	
Figure 8	32
Table 8	33
Comparative Cost of Living Index	34
Economic Base Multipliers for Wyoming Counties	35
Banking and Finance	
Figure 9	36
Table 9	37
Government	
Figure 10	38
Table 10	39
Sales and Use Tax Collections by County, 1970-82	40
Map 1 and Map 2	41
SBE Assessed Valuation by County, 1970-82	42
Map 3 and Map 4	43
Locally Assessed Valuation by County, 1970-82	44
Map 5 and Map 6	45
Cigarette Tax Distributions by County, 1970-82	46
Map 7 and Map 8	47
Converse County Profile	48
Niobrara County Profile	56
Key to Units Code	64
Bibliography	64
WQU Format Description	66
Recently Published Wyoming Related Research Reports	67

Project Manager.....	John Merrifield
Editorial Advisors.....	Shelby Gerking
	G. Fred Doll
Word Processing.....	Lorri Fuhs Pedersen
	Ema Shenefelt
Editorial Assistance.....	Beth Daniels
Research Aide.....	Ruth Tebbutt
Graphics	

Cover Page, Figures 12, 14, Maps 9-10.....University of Wyoming
Graphic Arts Services

Figure 1-11, 13, Maps 1-8.....Computer Graphics Package

Wyoming Quarterly Update is published four times per year in autumn, winter, spring, and summer editions.

Admission, employment, and programs of the University of Wyoming and the State of Wyoming are offered to all eligible people without regard to race, color, national origin, sex, religion, or political belief.

The articles appearing in this publication represent the opinions of the authors and do not necessarily reflect the views of the state of Wyoming or the University of Wyoming or their respective executive officers. Duplication or quotation of material in this publication is welcomed, but it is requested that WQU, the Institute for Policy Research, University of Wyoming, be credited.

Perspective on the Wyoming Scene

by John Merrifield

While some indicators have shown some recent improvement, others, in particular unemployment, have continued to deteriorate. The nationwide recession, widely believed to have hit bottom during the summer, has remained there. Consumers worried about unemployment failed to spend at levels expected by many industries. The channeling of taxcut monies into savings helped push down interest rates, but industries expecting a surge in spending to follow the ten percent July taxcut ended up with record inventories. At the end of August, auto dealers had an 88-day supply of cars on hand (Business Week, 11/1/82), the most in 18 years. By the end of October, sales incentives and slashed production had only cut inventories to 70 days' supply (Business Week, 11/29/82).

Efforts to cut inventories are continuing in many industries. As a result preliminary estimates of 3/82 GNP are virtually unchanged from 2/82. Unemployment jumped from 9.8 percent in July and August, to 10.1 percent in September, and 10.4 percent in October. Industrial production continued to slide downward, falling 0.8, 0.7, and 0.3 percent in October, September, and August, respectively. As a result, the nation's factories operated at an average 68.4 percent of capacity (Business Week, 12/6/82). Because of the combination of high inventories and sagging consumer confidence, substantial economic growth is unlikely for 4/82. Even with a robust Christmas shopping season, a lion's share of sales will come from inventories rather than new production. Maury Harris, Chief Economist for Paine-Webber, sees only a 0.3 percent annual rate of growth for 4/82, followed by 2.0 and 4.2 percent annual growth rates, respectively, during the first and second halves of 1983 (Wall Street Journal, (WSJ), 11/22/82). That's a somewhat less optimistic outlook than earlier projections of about four percent growth for all of 1983, and by historical standards would be a very sluggish recovery. At that rate it would take five to six years to get unemployment below seven percent, nationwide (WSJ, 11/30/82).

Another ominous economic note is the nation's trade balance, and rising protectionist sentiments throughout the world. Despite shrinking oil imports, a \$35 billion trade deficit was recorded for the first ten months of 1982, virtually assuring a record trade deficit for all of 1982 (WSJ, 11/29/82). A whopping \$75 billion trade deficit is a distinct possibility for all of 1983 (WSJ, 11/29/82). Recessionary pressures are causing more nations to erect trade barriers to protect domestic industries. Similar protectionist moves during the 1930's greatly exacerbated the depression. At this writing, many nations' trade ministers were having a less than harmonious meeting in Geneva in an effort to at least arrest moves to erect addition trade barriers.

Once again, the news for interest rates and inflation was on the positive side of the ledger. The half point jump in the CPI during October was a bit of a surprise, but not believed to be the beginning of a trend (WSJ, 11/24/82). For all of 1982, the CPI is expected to advance only five percent, quite an improvement over 8.7 and 12.5 percent inflation rates recorded in 1981 and 1980, respectively. Lower interest rates and the belief by investors that Republican losses during the November 2 election were not as serious as some expected, fueled a surge in the stock market. The Dow Jones Industrial Average reached an all-time high on November 3, the day after the election. In mid-November, all interest rates were at least 20 percent (not percentage points) lower than their 1982 peak, with some falling more than 40 percent (U.S. News and World Report (USNWR), 11/22/82). The Fed cut its discount rate by half a point to nine percent late on Friday, November 19. During the following week, most major banks cut their prime lending rates by half a percentage point to 11.5 percent (WSJ, 11/23/82). Finally, the easing of credit is also being reflected in long-term interest rates, in particular those faced by prospective home and car buyers. After ranging between 16.5 and 19 percent for the past few years, home mortgage rates now range between 12 and 14 percent (WSJ, 11/23/82). The maximum interest rate on federally insured home loans currently stands at 12.0 percent, down 27 percent since last January (USNWR, 11/29/82).

The lower mortgage rates prompted an almost instantaneous response from the housing market. October housing starts were up 1 percent from September, and 31 percent higher than October, 1981 (WSJ, 11/23/82). Since October, 1982 starts were also off, the 1 percent increase over September, 1982 is the more noteworthy of the two comparisons. Usually, deteriorating weather conditions alone assure that fewer housing starts occur in October than September. Perhaps even more encouraging is the 60 percent increase over October, 1981 in permits for future housing construction (WSJ, 11/23/82). Along with the surging stock market, building permits led the way in pushing up the U.S. Commerce Department's October index of leading indicators by 0.2 percent, a very positive sign. Five of ten indicators which make up the index were up (ABC Radio News, 11/30/82). The outlook for 1983 is for 30 to 50 percent more housing starts than in 1982 (WSJ, 11/23/82).

Other than the fact that real interest rates are, by historical standards, still very high, only one hint of bad news with respect to interest rates was observed. The latest cut in the Fed's discount rate was expected for a long time before it actually came, and many investors expected a full percentage point cut rather than the half point cut they got. As a result, stock prices fell on the first day of trading following the discount rate cut. Previous interest cuts had been greeted by the stock market with tremendous, sometimes record, rallies. The slow-in-coming, less-than-expected discount rate cut signalled to many investors that further declines in interest rates were likely to be more modest than observed during the last half of 1982. The slowdown in discount rate cuts may not be due to fundamental changes in economic conditions. Instead, it may be due to the impact of billions of dollars worth of maturing all-savers' certificates on the various money supply aggregates. Until that river of cash finds a new home, no one can be sure just what the money supply really is. The Fed may have to wait until that happens before deciding what credit policy to pursue. Still, the recent dip in the Federal Funds rate (interbank short-term borrowing) has some investors expecting another quick 1/2 to one point cut in the Fed's discount rate (WSJ, 11/29/82).

Despite calls by the President to stay the course, lawmakers are under considerable pressure to enact legislation to create jobs and make other mid-course corrections, perhaps during the lame-duck session which began November 29. One bill which seems assured of passage is a plan to repair many of the nation's highways and bridges by raising \$5.5 billion with a 5¢ hike in the federal gasoline tax. The repair projects are expected to create up to 320,000 jobs (WSJ, 11/23/82). President Reagan endorsed the plan during his regular weekly radio broadcast of November 27, calling the tax hike a user fee and the repairs long-overdue improvements in the nation's roads and bridges. Defense spending plans, especially the MX Missile basing mode, are also likely to be hotly debated as congress searches for ways to reduce the deficit.

Additional evidence that the nationwide recession's effects are being felt in Wyoming surfaced in the data for 3/82. The state's labor force and employment failed to show their usual third quarter peaks (see Figure 4). In fact they decreased 2.4 and 2.9 percent, respectively, compared to 2/82 and by a modest 0.3 and 2.6 percent compared to 3/81. The 3/82 unemployment rate averaged 5.6 percent, half a percentage point higher than in 2/82, and 2.2 percentage points higher than in 3/81. Fewer tourists visited Grand Teton and Yellowstone National Parks during 3/82 than during 3/81 (see Table 3). Construction and auto sales continued their overall declining trends (see Tables 6 and 8, respectively), ongoing now since 1979. Oil prices continued to weaken as the worldwide recession threatens the very existence of OPEC. In an effort to stabilize prices, the Saudis have cut their production from 10 million barrels per day during much of 1979 and 1980 to its current level of 5.5 million barrels per day (Business Week, 11/08/82). Other OPEC producers also cut their output well below historical levels. OPEC is likely to survive, but only at the expense of further cuts in output and prices. In Wyoming, that is likely to mean less exploration for oil, and in real terms, fairly stable prices. Projections by the Legislative Service Office (LSO) see no real increase in oil prices through 1986, and gradually declining production.

With energy stockpiles (i.e. oil, gas, coal, uranium) high throughout the nation, a recovery in Wyoming is likely to lag behind a nationwide recovery by several months. The words recovery and recession when applied to Wyoming must be kept in perspective. If the entire nation had Wyoming's sub-six percent unemployment rate, its 2.04 percent rate of inflation (measured by the Department of Administrative Control for October, 1981 through September 1982), and its 1981 per capita income of \$11,665 (Survey of Current Business, 8/82), 11.2 percent higher than nationwide, the nation would not be in a recession. Consider also President Reagan's prediction, shortly before the announcement of the unemployment rate for September, that with increased labor force participation by women and older Americans, unemployment might not ever again dip below six percent, nationwide. Even during the recession, Wyoming's unemployment rate remains well below six percent. Beyond the very immediate future, Wyoming's economic outlook is very bright. New natural gas discoveries, estimates by the Department of energy that natural gas prices will average 20 percent higher this winter than last, and complete price de-regulation in 1985 will bring many new jobs to Wyoming. Several factors could boost Wyoming's coal production beyond the conservative LSO projections of a 33 percent increase in coal production by 1986. Growing international concern about acid rain may shift some of the nation's coal production away from high-sulfur eastern and midwestern coal mines and towards increased production of Wyoming's low-sulfur coal. Coal exports (internationally) could boost Wyoming production, provided proper port facilities to load coal freighters become more widely available on the east and west coast.

On November 22, President Reagan announced his plans to put 100 MX missiles in a 14-15 square mile strip near Cheyenne's F.E. Warren Air Force Base. The ultimate economic impact of that decision remains very uncertain. Of course, congress could refuse to fund the plan, or the original plan could be revised significantly. If congress finds that the dense-pack basing mode, as first proposed, does not guarantee that a number of the missiles would survive a first strike,

the plan could be expanded to include an anti-ballistic missile system to protect the MX missiles. If enacted in any form, it seems likely that Cheyenne would become yet another Wyoming boomtown. Wyoming's previous experience managing rapid growth suggests that initial projections of growth usually fall far short of what actually happens. Construction plans for Sweetwater County's Jim Bridger Power Plant called for a peak construction labor force of 960 in 1974. Lower than expected productivity, the result of high rates of worker turnover, caused the workforce to peak at 3200 in 1973 (Shale Country, 9/76). The high rates of turnover were due to congestion, higher prices, and shortages of public and private goods and services. Similar problems could occur in Cheyenne if rapid growth begins before substantial mitigation measures are put in place. As many parts of Wyoming have already discovered, rapid growth brings both good and bad changes. Whether the net effect is good or bad will depend on front-end planning and financing of improvements required to adequately handle the population increase.

Winter Minerals Outlook

OVERVIEW

by Gary B. Glass, State Geologist, Wyoming Geological Survey

In September of 1982, the Legislative Services Office in collaboration with the Ad Valorem Tax Division of the Department of Revenue, the Oil and Gas Conservation Commission, the Minerals Division of the Department of Economic Planning and Development, and the Geological Survey of Wyoming prepared consensus forecasts of taxable production and taxable valuation per unit of production for the next five years. By multiplying the forecasted taxable production times the valuation per unit for each year, the Legislative Services Office conservatively predicts the following annual mineral valuations for 1982 - 1986.

Calendar Year	Total Mineral Valuation	Mineral Valuation as a Percentage of Total State Valuation
*1980	\$4,026,165,628	65.2%
*1981	\$5,852,764,024	72.1%
1982	\$5,752,091,000	
1983	\$6,109,458,000	
1984	\$6,686,940,000	
1985	\$7,165,189,000	
1986	\$7,499,184,000	

*These are actual values shown for comparison.

Most significantly, this forecast predicts that the total mineral valuation for 1982 will actually be less than that of 1981 - something that hasn't happened since 1972. In that year, mineral valuation dipped \$3.7 million below that of 1971. But those were the early years before the Arab oil embargo and the catastrophic coal boom. Since 1972, total mineral valuation has constantly increased as taxable production and value per unit of production both increased for gas, coal, uranium, trona, bentonite, gypsum, and iron ore. Although oil production leveled off or declined in those same years, its valuation per unit increased at an unparalleled rate.

However, in 1982, the recession, coupled with the demise of the uranium industry, have finally slowed the growth of Wyoming's mineral industries just as they have slowed the mineral industries of sister states across the nation. Today, demands for all of Wyoming's industrial and energy minerals, except coal and natural gas, have leveled off or even declined, and the prices paid for these commodities have nearly stabilized or actually declined. With both production and valuation per unit declining for most minerals, it is not surprising that total mineral valuation is forecast to decrease in 1982. Fortunately, production increases for coal and natural gas will soften the crunch in 1982, but 1982 coal production may only show a two percent gain over 1981 production.

Although the proof of this most recent forecast by the Legislative Services Office is still several months away, there is little doubt that mineral valuation in 1982 will fall far short of the growth it has shown in recent years. Although the predictions for 1983 to 1986 are more optimistic, these predictions are predicated on the recession slowing or ending. Clearly, the duration of the current recession will be a dominant factor in future forecasts.

In preparing forecasts of taxable production for the Legislative Services Office, the staff of the Geological Survey of Wyoming also generated forecasts of gross production for oil, natural gas, coal, uranium, and trona. These forecasts, modified in some cases by factors presented by other agency participants, are included in the following mineral summaries. In summary, the oil and uranium forecasts were the most pessimistic since declining production is shown for both. Trona production is shown leveling off in 1983, but increasing again in 1984, and subsequent years. Coal and natural gas production are the highlights as they are both expected to continue increasing each year.

URANIUM AND NONFUEL MINERALS UPDATE

by Ray E. Harris, Uranium and Industrial Minerals Geologist, Wyoming Geological Survey

The uranium industry in Wyoming continues to suffer cutbacks and layoffs as uranium supply contracts expire with no new contracts negotiated. The reduced demand for electricity reported in the last Wyoming Quarterly Update continues, and 1986 may be the earliest year possible for a major upturn. Based on this prognosis, the Survey's most recent production forecast is shown in the following table:

WYOMING URANIUM PRODUCTION FORECAST TO 1987

Calendar Year	Gross Uranium Production (Millions of Tons)
*1980	5.4
*1981	4.6
1982	2.7
1983	2.6
1984	2.6
1985	2.8
1986	3.3
1987	3.3

*This is actual production for comparison.

Western Nuclear Company laid off 35 more people in November. Their reduction is typical of those uranium operations that are still existing. Three years ago Western Nuclear employed about 600 people in its Jeffrey City operations. Now, it employs 45. The current and past status of uranium mining operations in Wyoming is summarized below:

Mining operations, 1978 - 17

Mines opened since 1978 - 2

Mines closed since 1978 - 7

Mining operations, 1982 - 12

Mines proposed/postponed - 15

Companies currently operating uranium mines in Wyoming include: Rocky Mountain Energy, Union Carbide, Western Nuclear, Exxon, Petrochemicals, Pathfinder-COGENA, Minerals Exploration, and Energy Fuels Nuclear.

The Tennessee Valley Authority (TVA) plans to buy 17,000 acres of uranium land in Natrona and Fremont counties. Under the terms of an existing lease, the TVA must either buy the property or lose its rights to the uranium. Seeing a demand for uranium in the mid-1980's, TVA chose to purchase the land.

Layoffs continue in the trona industry, which is operating at a level about 20 percent below last year. Most of the five trona mining operations and soda ash producers anticipate no further cutbacks, but they are operating near the red line. Our trona production forecast follows:

WYOMING TRONA PRODUCTION FORECAST TO 1987

Calendar Year	Gross Trona Production (Millions of Tons)
*1980	12.2
*1981	11.8
1982	11.0
1983	11.0
1984	12.0
1985	13.0
1986	14.0
1987	15.0

*These are actual values for comparison.

Bentonite production is less than last year although no major layoffs have been announced.

Chevron Chemical Company announced in November that it would postpone construction of a fertilizer plant near Rock Springs. Their plant would have used phosphate from Utah and sulphur from Wyoming to make fertilizer. A drastic reduction in the demand for phosphate fertilizer by the agriculture industry was blamed for their decision to postpone construction indefinitely. No phosphate is currently mined in Wyoming.

Sand, gravel, and construction aggregate mining have remained at near record levels due primarily to continued highway construction. Decreasing production in the last quarter is typical due to seasonal slowing of construction activities. Should the MX project proceed, there will probably be a great demand for construction aggregates in southeastern Wyoming and adjoining states.

Several companies have expressed interest in hydrofrac and silica (glass) sand in Wyoming, and some exploration activity for these commodities has been reported in the southeastern, northeastern, and central areas of the State.

COAL UPDATE

by Richard W. Jones, Staff Coal Geologist, Wyoming Geological Survey

During 1982, highlights for Wyoming coal included (1) an increase in production despite poor economic conditions and a soft coal market and (2) the occurrence of the largest Federal coal lease sale in history. Although we earlier predicted that Wyoming coal production might only reach 107 million tons in 1982, there are indications that this tonnage may also be too high. A rough estimate, based on coal car loadings reported by the U.S. Department of Energy, indicates that Wyoming coal production through October 1982 was slightly less than that reported for the same period in 1981. An estimate, based on reported coal deliveries to power plants, indicates that Wyoming coal production through September 1982 is slightly ahead of production reported for the same period in 1981. By projecting these production trends to the end of the year, Wyoming's production will probably be between 105 and 107 million tons; an increase over the 102.7 million tons in 1981.

The following table is our revised production forecast for the next ten years.

WYOMING COAL PRODUCTION FORECAST TO 1990

<u>Year</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Best Guess</u>	<u>Percent Increase Per Year</u>	<u>Estimated Contracted Production</u>	<u>Percent Below Contracts</u>
1981	-	-	102.7	9	110	7
1982	111	105	106	3	120	12
1983	117	112	112	6	130	14
1984	125	120	121	8	138	12
1985	134	129	131	8	142	8
1986	142	134	142	8	148	4
1987	156	140	148	4	153	4
1988	161	145	153	3	159	4
1989	162	148	155	1	159	2
1990	161	149	155	0	159	3

There were three Federal coal lease sales in Wyoming during 1982. One lease tract was located in Carbon County; the remaining six leased tracts were all located in the Powder River Basin. In total, an estimated 1.3 billion tons of coal under 20,848 acres were leased. The controversial bonus bids totaled \$63.9 million, which averages about \$3,063 per acre or 4.9 cents per ton of coal. The State of Wyoming will receive half these bonus bids, or about \$32 million, which will go into a special impact account for appropriation by the State Legislature. A lawsuit, filed in U.S. District Court, Billings, Montana, by the Northern Cheyenne Tribe and the National Wildlife Federation in an attempt to halt the issuance of leases from the two Powder River Basin lease sales is still pending.

In the Powder River Basin, one new mine began shipping coal this summer, another began overburden removal in anticipation of 1983 coal production, and three additional mines are in early construction or permit stages. Two other coal-related projects in this basin are apparently still going forward: the Hampshire Energy liquefaction plant and the Energy Transportation System, Inc. coal-slurry pipeline. Hampshire Energy's proposed coal-to-gasoline plant is still in the running for Federal synfuel subsidies despite the loss of a major financial partner, Standard Oil Company of Ohio, in late October. The loss of this major partner in the Hampshire project was somewhat counteracted on November 20th when the Wyoming Industrial Siting Council approved Hampshire's permit application after fifteen days of hearings, and on November 22nd when a major synfuels project proposed by Ashland Oil Company, which was expected to be Hampshire's primary competition for Federal subsidies, was abandoned.

The \$4 billion privately-financed coal-slurry pipeline that Energy Transportation Systems, Inc. is planning to build from the Powder River Basin to Oklahoma and Arkansas is apparently still progressing despite the recent loss of a 25 percent partner in the project, Atlantic Richfield.

In other parts of the State, the only good news was the opening of the Leucite Hills strip mine in Sweetwater County in the late summer. The bad news for Wyoming's coal industry centered in southern and western Wyoming. Two coal mines in the Hanna Basin closed in 1982 and with Arch Mineral Corporation announcing the layoff of 115 workers from the Seminole No. 2 mine in November, the total number of Wyoming coal miners out-of-work in 1982 approaches 700.

Production from southern and western Wyoming has accounted for over one-fourth of the State's production in the last few years. With the production decline in this area of the State and the increased production from the Powder River Basin, southern and western Wyoming's share of the State's production will probably drop to less than 20 percent in the next few years.

OIL AND GAS UPDATE

by Alan J. VerPloeg, Staff Petroleum Geologist, Wyoming Geological Survey

Final production statistics for 1981 have been released by the Wyoming Oil and Gas Conservation Commission. Oil production totalled 122,173,818 barrels, a 3.3% reduction from the 126,361,962 barrels produced in 1980. Totals for gas production were put at 455,352,540 MCF, a 1.1% increase over the 450,553,045 MCF produced in 1980. Production for 1982 should show a similar decline for oil, coupled with a larger increase in gas production. Oil and gas production forecasts are shown in the following table:

WYOMING OIL AND GAS PRODUCTION FORECAST TO 1988

<u>Calendar Year</u>	<u>Natural Gas Production (Billions of Cubic Feet)</u>	<u>Oil Production (Millions of Barrels)</u>
*1980	450.6	126.4
*1981	455.4	122.1
1982	500.0	119.0
1983	567.0	116.0
1984	647.0	112.0
1985	667.0	108.0
1986	693.0	106.0
1987	740.0	105.5
1988	780.0	105.0

*These are actual values for comparison.

Exploratory success continues in the Overthrust Belt with Gulf Oil announcing a new pay discovery in Glasscock Hollow Field. The new well is located 3 miles southeast of Evanston and produces from the Jurassic Twin Creek Limestone at the rate of 2.4 million cubic feet of gas and 420 barrels of condensate per day. Glasscock Hollow Field already produces from the Jurassic Nugget Sandstone.

Amoco Production announced three new discoveries in the Overthrust Belt. In Wyoming, they completed the 1 Champlin-363 Amoco-B, producing 3.1 million cubic feet of gas and 601 barrels of condensate per day from the Jurassic Nugget Sandstone. The well is 3½ miles northeast of Anschutz Ranch East Field. Also, in Wyoming, Amoco completed the 1 Champlin-505 Amoco-B, producing 9.0 million cubic feet of gas and 120 barrels of condensate per day from the Ordovician Bighorn Dolomite and 6.1 million cubic feet of gas and 165 barrels of condensate per day from the Mississippian Madison Limestone. The Madison gas has a H₂S content of 19.1%. This discovery is 2½ miles west of the Whitney Canyon/Carter Creek Field. Finally, in Utah, Amoco completed the 1 Island Ranching-D, immediately north of Anschutz Ranch Field. The well flowed 3.4 million cubic feet of gas and 100 barrels of condensate from the Pennsylvania Weber Sandstone. The gas is sour and contains 9.4% H₂S.

Amoco Production's Whitney Canyon processing plant was officially dedicated November 18th. The \$340 million facility began moving gas on the 17th of November. The plant is currently moving 40 million cubic feet of gas per day into the Trailblazer pipeline, but is designed to produce a daily maximum of 190 million cubic feet of gas, 1,200 long tons of sulphur, 6,000 barrels of condensate, and 12,600 barrels of natural gas liquids. The produced gas is transported to the midwest, the condensate is piped to Amoco's Whiting refinery near Chicago, the natural gas liquids are piped to the Gulf Coast area, and the sulphur is shipped by rail to Florida.

PRECIOUS METALS, DIAMONDS AND OTHER (HARD ROCK) MINERALS UPDATE

by W. Dan Hausel, Deputy Director, Wyoming Geological Survey

During 1982, exploration for precious metal deposits in Wyoming was at one of its highest peaks. Several major mining firms made exploration commitments to either increase or to initiate exploration in the State during the year.

A major percentage of the exploration activities were centered on the State's greenstone belts (see Figure 1). To date, the only reported significant gold discovery was that by



Figure 1. Location of Wyoming Greenstone and Archean metasedimentary and metavolcanic rocks (in black)

Geological Survey of Wyoming geologists who located significant gold associated with quartz veins and iron formations in the Bradley Peak area of the Seminoe Mountains north of Rawlins. The Geological Survey of Wyoming's announcement led to a claim staking rush by numerous mining firms. During the summer, Timberline Minerals, Inc. reported preliminary drilling results on their recently acquired property in the Penn Mine area of Bradley Peak near the site of the Wyoming Geological Survey's discovery. Timberline reported their property to contain rock averaging 0.28 ounces of gold per ton.

Some exploration for platinum and gold among the Mullen Creek-Nash Fork shear zone was reported. Exploration also extended south into some layered mafic complexes in the Medicine Bow Mountains.

The Lake Alice District near Cokeville, Wyoming, received some attention for exploration of copper and silver. This region in the Overthrust Belt contains mineralized red bed sandstones of the Nugget Formation. Both the Beckwith and the Wells formations are also mineralized elsewhere in the Overthrust Belt. Exploration for the metals was reported as far south as Evanston to as far north as Teton Pass.

With the present state of the nation's economy, exploration for precious metals is expected to decline in 1983.

Exploration for diamond-bearing kimberlite continued throughout 1982. The Geological Survey of Wyoming continued its research and exploration activities in the Southern Laramie Range. Cominco American, Inc. and Superior Minerals reportedly searched several regions in the State. Areas which received the greatest attention were the Laramie Peak and Medicine Bow Mountains.

Exploration for diamonds is expected to continue through 1983. Both Cominco American and Superior Minerals are committed to testing kimberlite diatremes for commercial mineralization, and are expected to continue exploring Colorado and Wyoming through 1983.

Iron ore production for the State was down from previous years. This production has steadily declined since 1980, first, with the closure of CF & I's Sunrise Mine in the Hartville Uplift, and then more recently with an extended shutdown this summer and fall of U.S. Steel Corporation's Atlantic City iron ore mine on the southern tip of the Wind River Range. Wyoming's 1980 iron ore production was 4,876,500 tons; the 1981 production was 4,667,000 tons. The 1982 production is expected to show a significant decline. The temporary mine closure was used to reduce inventories of previously mined and stockpiled taconite (iron ore).

The iron ore industry is depressed nationwide and the near future of Wyoming's industry is weak, at best.

Winter Agricultural Outlook

by Robert D. Carver
University of Wyoming

Like much of the rest of the nation's economy, agriculture is facing some uncertain times. Prices for nearly all grain products are below the levels of a year ago, and the only real bright spot in the livestock picture is reflected in higher hog prices.

To understand the current pessimistic outlook that exists in most sectors of the agricultural economy, it is important to examine the current situation. Supplies of nearly every major feed and food grain produced in the U.S. are above year ago levels. The November 1, USDA Crop Production Report indicated a record 8.33 billion bushels of corn would be harvested in 1982. Wheat stocks are up 10 percent above year earlier levels.

The USDA supply-demand report released in October lowered export projections for wheat for the 1982-83 marketing year some 73 million bushels below their earlier projection for 1982-83. This reduction is apparently based on a lowering of estimated USSR purchases. Corn exports for 1982-83 are estimated at 2,250 million bushels, up about 14 percent from last year, but not enough to offset the increased production, the large increase in old stocks and a slight projected decline in domestic use. Thus, carryover stocks next fall are projected to be 3.3 billion bushels, up about 12 percent.

Ending stocks of all other major crops, with the possible exception of sunflowers, are expected to increase at the end of this marketing year.

The depressing U.S. supply situation doesn't tell the whole story, however. Weak world demand and exportable supplies in several other exporting countries are also important factors. The entire world economy, with few exceptions, is experiencing sluggish activity. It is important to note that the production from one of every three acres in the U.S. is exported into the world economy. With many countries experiencing financial problems, export demand has declined. In addition, the European Community has large surplus supplies of wheat they want to sell, and have increased their export subsidies in order to move it into world channels. Canada has record production this year. Argentina's wheat production is up about 25 percent. These are all factors that would tend to be price depressing even if the Russians were buying U.S. grains in the same quantities they bought last year.

All in all, the price picture for grains remains depressing throughout the coming winter months. The most hopeful keys to price strength later in the marketing year rest with improved worldwide economic situation and the possibility of deteriorating 1983 world weather and crop conditions.

The U.S. livestock scenario generally remains depressing in the coming months. Continued low slaughter cattle prices are projected at least until the 2nd quarter of 1983. If the U.S. economy would begin to rebound as we move into spring, this would add strength to fed cattle prices at the same time. Slaughter cattle price improvements will be immediately reflected in higher bids for feeder cattle. Conversely, price slumps for slaughter cattle will push feeder cattle prices lower.

Feed and protein supplies are huge across most of the U.S. With record hay supplies and ample forage, many producers are keeping calves over the winter for possible sale in the spring. Most stocker operators in Wyoming ended up on the profit side of the ledger by pasturing steers in the summer of 1982. Although it is a little early to tell, many producers are preparing their bankers for similar operations in 1983.

The domestic wool market remains inactive, with the September average of U.S. farm price for shorn wool (grease basis) reported at 66.7 cents, down 21 percent from the year-ago price of 84.3 cents. Domestic wool prices are expected to remain depressed through the December-January period.

Continued high slaughter levels have prevented any seasonal price strength in the lamb industry. Barring any additional heavyweight problems, slaughter prices are expected to trade in the \$50 range during December.

EXPORTATION AND STATE AND LOCAL TAXES*:

A COMPARATIVE ANALYSIS

by Shelby Gerking, William Morgan, and John Mutti

1. Introduction

The current political interest in federally-legislated limitations on mineral production taxes would seem to suggest that states which impose such taxes are much more successful in exporting this tax burden than is the case for other states relying on alternative types of taxes. Many other states, however, successfully export taxes, too. In fact, some of the strongest proponents of mineral production tax limitations come from states which derive substantial revenues from taxes that are shifted to residents of other states. This result is demonstrated in the case of several midwestern and eastern industrial states and those estimates are compared to the situation of a major energy producing state, Wyoming. More specifically, attention is drawn to the states of New York, Michigan, Wisconsin, Florida, and California which export, both in absolute dollar and percentage terms, large amounts of state income taxes, corporate profits taxes, industrial property taxes, or taxes on goods and services purchased by tourists and business travelers. The dollar amounts of tax revenue exported frequently are greater than Wyoming's total dollar exportation of production taxes on all minerals combined. Additionally, the total dollar volume of taxes that New York exports is nearly double the Wyoming state government's FY 1981 total budgeted expenditures.

2. The Basis for Tax Exportation

How are taxes exported by either energy producing or non-energy producing states? When taxes raise the cost of production in an industry, one result can be that consumers of those products face higher prices. Another result can be that producers earn lower profits. The effect on consumers will be greater when their demand for the product is not very responsive to changes in price, a situation which exists when there are few good substitutes for the taxed good. For example, a tax on salt cannot be avoided easily by consumers due to the lack of a good substitute for it. As a consequence, if all states produced salt but only some levied a tax on its production, then the larger the share of total production accounted for by the taxing states, the fewer the alternative sources of supply, or substitutes, that would be available to the consumer, the more price would rise as a result.

The effect of the tax on producers will be greater when they are not able to shift production very easily to states with lower taxes, or to production of goods where taxes have less effect on costs. If salt could be produced in only one state in the nation, and the equipment used in mining salt had few uses elsewhere in the economy, the producers of salt would find it difficult to avoid a tax on salt production.

These basic ideas are useful in determining the incidence (i.e., who actually pays) of a particular tax. A tax is said to be backward shifted when it is borne by producers and forward shifted when it is borne by consumers. To the extent that the producers or consumers are not residents of the taxing state, the tax is exported.

3. The Exportation of State Personal Income, Corporate Profits and Industrial Property Taxesa. Personal Income Taxes

A tax on income may not affect the cost of production at all. For example, if taxpayers must remain in the labor force in their own state and cannot move to another, then employers will not have to pay higher wages to offset the higher cost of living of workers. Instead, workers simply end up with lower after-tax income. However, even though workers cannot avoid the tax, some of it still can be exported. Such exportation is possible because, like, many other types of taxes, state personal income taxes paid can be deducted from federally taxable income if deductions are itemized. If all states have identical state personal income taxes, this deductibility provision is less likely to help any particular state. When some states have high state personal income taxes and other states have no tax at all, the high tax states do benefit at the expense of the low tax states. The figures in Summary Table 1 show that New York, Minnesota, Wisconsin and Michigan are relatively high tax states, which were able to export hundreds of millions of dollars of their 1981 personal income tax burden. States with low personal income tax rates, including many in the Rocky Mountain region, must bear the cost of higher federal taxes, reduced government services or the economically debilitating effects of greater deficit spending by the federal government. For example, Nevada, Washington and Wyoming do not levy personal income taxes and therefore import this type of liability from other states.

*This is the executive summary of a report by the same name. The study was conducted by the Institute for Policy Research. The complete report is available upon request.

b. Corporate Profits Taxes and Taxes on Industrial Property

State taxes on the capital used in industrial production result in higher costs of doing business in the taxing state. When businesses mark up prices to recover the additional costs of state corporate profits taxes and property taxes, output in the taxing state will fall as consumers turn to goods produced in other states. Producers in the taxing state may be successful in raising their output prices, though, when the greater demand in other states drives up costs of production there. If the taxing state has a dominant market position, and producers in other states cannot expand output easily, then taxes will be exported when the output of the state is sold primarily to non-residents. This form of exportation is especially relevant regarding manufactured products from midwestern and eastern states which are sold to energy producing states in the Rocky Mountain region. The manufacturing states successfully export taxes, which are imported by purchasers of those products.

Profits taxes and property taxes still may be exported even when the taxing state does not have sufficient market power to increase prices. In that case exportation occurs because the resulting lower profits often are earned by out-of-state stockholders.

The figures in Summary Table 1 show that in dollar terms Michigan and Ohio are major exporters of corporate profits taxes, and that Michigan and New York are major exporters of taxes on industrial property. Michigan is particularly successful in exporting these taxes because of the dominant role it plays in markets such as automobiles. Successful tax exportation in other states such as Wisconsin depends more upon the earnings loss of out-of-state stockholders. Expressing the amount of the corporate profits tax or property tax exported as a share of the tax paid in that industry yields some remarkably high ratios: 87 percent in Michigan, 76 percent in Wisconsin, 73 percent in Ohio and Pennsylvania, 71 percent in Indiana, and 69 percent in New Jersey and New York. Both the dollar amounts, and these percentages are a useful reference point for evaluating the tax exportation of non-energy versus energy producing states.

4. Other Taxes

The exportation characteristics of three additional types of taxes are also considered: (1) state and local sales, use, general excise, and motor fuel taxes faced by travelers, (2) the stock transfer tax formerly levied by the state of New York, and (3) the Connecticut insurance tax. With respect to the taxes faced by travelers, the U.S. Travel Data Center has computed an estimate of such payments for many states including California, Florida, Hawaii, and New York. The bulk of those taxes would be forward shifted directly to the travelers making purchases. Multiplying those figures by the fraction of traveler nights spent in that state by out-of-state residents produces the figures reported in Summary Table 11, which show that California, New York, and Florida all exported more than \$400 million via these taxes. Rates of tax exportation on taxes facing travelers ranged from 47% in California to 96% in Hawaii. The New York State Stock transfer tax recently has been phased out through a series of rebates. Effective April, 1978, the rebate for New York residents was 100 percent and effective October, 1981, a full rebate was granted to non-residents as well. However, for the 1981 tax year, the state of New York exported \$453 million on stock transferred to out-of-state residents, through direct forward shifting. Finally, the Connecticut insurance tax is likely to be passed forward to consumers, since the demand for insurance is price inelastic. Thus, to the extent that policy holders are out-of-state residents, the tax would be exported. In 1981 that amount was \$68 million in tax revenue exported.

5. Mineral Production Taxes

Wyoming is one of several western states that impose taxes on the production of coal, uranium, crude oil, and natural gas. More specifically, Wyoming taxes the production of those minerals in three ways. First, in lieu of any taxes on the land where mineral production occurs, persons extracting deposits of any mineral must pay an excise tax based on the value of gross product. Second, a special excise tax, also based upon value of gross product, is levied on the privilege of producing coal. Third, local property taxes are levied by county governments in which the mineral production occurs. The base for those property taxes also consists of annual value of gross output; however, the tax rates vary from county to county. The average total tax rate on the production of each mineral is: (1) coal, 16.82%, (2) uranium, 12.18%, (3) crude oil, 12.68%, (4) stripper oil, 10.68%, and (5) natural gas, 12.38%.

A major percentage of the revenue raised by these taxes actually is paid by residents of states other than Wyoming; i.e., the taxes are largely exported. In fact, it is hard to see how the situation could be otherwise. The minerals extraction industry in Wyoming, and many other western states for that matter, is dominated by national corporations which sell mainly in out-of-state markets and are held largely by out-of-state stockholders. Therefore, regardless of whether the production taxes levied are shifted forward to consumers or backward to producers, they end up being almost entirely exported. The precise mechanisms by which that tax exportation occurs, however, varies according to which mineral is considered. As a result, the case of each is considered separately in an effort to explain which factors are of greater importance to consider when analyzing the production tax exportation opportunities that any mineral producing state may face.

SUMMARY TABLE I
ESTIMATED INTERSTATE EXPORTATION OF STATE PERSONAL INCOME TAXES, STATE CORPORATION INCOME TAXES
AND LOCAL PROPERTY TAXES ON MANUFACTURING FROM NINE INDUSTRIAL STATES
(dollars million)

State	State Personal Income Tax				State Corporate Income Tax				Local Property Tax				Total Net \$ Amount of Exportation (Importation), Three Taxes Combined	
	\$ Amount Exported (Imported)		Exportation (Importation) as Share of State Personal Income Tax Revenue		\$ Amount Exported (Imported)		Exportation (Importation) as Share of State Corporation Income Tax Revenue		\$ Amount Exported (Imported)		Exportation (Importation) as Share of Local Property Tax Revenue			
	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981
Illinois ²	0	0	0	0	27	28	.22	.27	(-15)	(-27)	(.07)	(.12)	12	1
Indiana	(-40)	(-46)	(.07)	(.07)	81	79	.61	.61	56	54	.71	.65	97	87
Michigan ²	100	106	.05	.05	157	98	.48	.37	214	253	.66	.68	471	457
Minnesota	127	141	.10	.10	19	19	.53	.53	9	10	.32	.33	155	170
Ohio	(-187)	(-204)	(.18)	(.18)	141	136	.73	.73	38	40	.41	.42	(-8)	(-28)
Wisconsin ²	126	146	.09	.09	72	55	.75	.76	36	36	.70	.70	234	237
New Jersey	-60	-69	(.06)	(.06)	78	96	.69	.68	79	85	.22	.22	97	112
New York ²	632	701	.11	.11	124	133	.68	.63	213	219	.35	.35	969	1,053
Pennsylvania ²	66	75	.04	.04	116	108	.73	.74	49	51	.23	.23	231	234

¹ Exportation (Importation) as a share of estimated taxes paid by manufacturing Standard Industrial Classifications analyzed.
Property tax estimates are for the 1979 and 1980 tax years.

SUMMARY TABLE 11

ESTIMATED INTERSTATE EXPORTATION OF SEVERANCE TAXES AND
CERTAIN SALES AND EXCISE TAXES, FOR SELECTED STATES
(dollars million)

State and Local Taxes on Travel ¹			
State	\$ Amount Exported 1979	Exportation as Share of Travel Tax Revenue Collected	Incidence of Exported Tax ³
California	446	.47	F
Florida	415	.87	F
Hawaii	82	.96	F
New York	453	.65	F

New York Stock Transfer Tax ²			
\$ Amount Exported 1981	Exportation as Share of Transfer Tax Revenue Collected		Incidence of Exported Tax ³
453	1.00		F

Connecticut Insurance Tax			
\$ Amount Exported 1981	Exportation as Share of Transfer Tax Revenue Collected		Incidence of Exported Tax ³
68	1.00		F

Wyoming Severance Taxes			
Energy Source	\$ Amount Exported 1980	Exportation as Share of Severance Tax Revenue Collected	Incidence of Exported Tax ³
Coal	90	.93	F
Uranium	8	1.00	B
Oil	108	.83	B
Natural Gas	44	.92	F/B

¹Comprised mainly of state and local sales, use, and gasoline taxes.

²During the 1981 tax year, the tax applied only to stock transferred to out-of-state residents. Effective October, 1981, the tax was terminated.

³F = Forward shifting to consumers.
B = Backward shifting to producers.

a. Coal

Because the coal extraction industry, viewed from a national perspective, is highly competitive, is not dominated by any one state, and has some short run excess capacity particularly in western states, any production taxes levied would appear to be shifted backward to producers. However, much of western coal production is tied to long-term sales contracts with thermal power generation plants located outside the region. Virtually all of those sales contracts treat any production taxes levied as a cost of producing coal and explicitly provide for such taxes to be passed forward to the purchaser. In Wyoming, for example, about 84% of coal sales are made to out-of-state residents and 83% of total coal sales are made under contracts having 10 or more years remaining prior to expiration. Moreover, most of the comparatively small amount of Wyoming produced coal retained in that state is sold to power plants which, in turn, export about half of the electricity generated. These considerations support the conclusion shown in Summary Table II, that 92.5% of Wyoming's 1980 coal production taxes, or about \$90 million, were exported to other states. Over the next several years, this tax exportation figure is unlikely to be greatly altered. Wyoming's production taxes may result in lower future bids for that state's coal and, therefore, greater backward shifting of the tax. Nevertheless, since all major coal producers operating in Wyoming are out-of-state corporations and much of that state's coal production occurs on federal land, the bulk of production taxes levied on this activity still will be exported. Moreover, production taxes on coal levied by other western states also will be exported via forward shifting to consumers if those states sell a major portion of their coal to out-of-state utilities under long term fixed supply contracts. But even if that situation does not prevail, production taxes on coal still may be exported if they are backward shifted to out-of-state producers.

b. Uranium

The uranium market can be characterized as an imperfect market of international scope, which is dominated by a small number of national and international corporations. Two western states, Wyoming and New Mexico, account for about 70% of current U.S. production. However, the industry currently is in a very depressed state with large amounts of excess capacity. Consequently, in the short-run, at least a portion of the production taxes levied on uranium output probably would be shifted backward to producers. Those producers can safely be assumed to have few stockholders in states where production occurs. Consequently, virtually all of the production tax payments made in Wyoming and New Mexico would be exported to stockholders residing in other states. In Wyoming, those tax payments amounted to \$8.4 million in 1980, as shown in Summary Table II.

c. Crude Oil

To determine who ends up paying production taxes on crude oil, attention must be focused on demand and supply conditions. With respect to demand, a key factor is that buyers can shift away from a given state's oil if it rises in price, for example, due to increases in production taxes. Crude oil is inexpensively transported and buyers, therefore, are able to choose among many alternative suppliers. With respect to supply, because no single state accounts for a dominant share of world oil production, the percentage change in demand seen by those alternative suppliers will not be large enough to appreciably drive up crude oil prices. Consequently, the general presumption is that state and local production taxes on crude oil production are passed backward to producers.

Even though production taxes are deducted from the revenues received by oil producers, their burden is significantly affected by the way in which other taxes are levied. The Windfall Profit Tax, for example, treats state-imposed crude oil production taxes as deductible expenses in computing the liability. Since Wyoming's production tax on that mineral is low as compared with rates imposed by other major producing states, that particular feature results in a disproportionately large share of federal Windfall Profit Tax liabilities to be borne by Wyoming oil producers. In any case, about 82.9 percent of Wyoming's production taxes on crude oil, or \$107.8 million of the total of \$131 million, was exported to residents of other states. Those figures are shown in Summary Table II.

In other states, crude oil production taxes also are likely to be passed backward. To the extent that producers there are residents of other states, those taxes will be exported. Also, if the producers are in-state residents, at least a portion of the tax still can be exported, given their deductibility in computing Windfall Profit Tax liabilities, if that state's production tax rate is higher than the national weighted average production tax rate on crude oil.

d. Natural Gas

Knowledge of the government regulations covering natural gas is essential to understanding the potential shifting and incidence of any production taxes levied on that commodity. A major share of the natural gas market (interstate sales) has been subject to federal price regulation for approximately twenty-five years and now even most intrastate sales of natural gas are subject to regulation under the very complex Natural Gas Policy Act of 1978. The Natural Gas Policy Act expands the authority of the Federal Energy Regulatory Commission to virtually all natural gas production, sets ceiling prices at the wellhead, and provides a basis for allocating gas among users.

In the interstate market, forward shifting of new or higher existing production taxes is permitted because they are considered a component of incremental costs. Nevertheless, the ultimate incidence of the tax depends upon the price responsiveness of demand and the price of the appropriate alternative fuels (fuel oil) available to each user. Since many users purchase gas at prices which are fixed at less than market clearing levels, state and local production taxes on natural gas are expected to be shifted forward in the interstate market. In Wyoming, 93% of natural gas production is dedicated to the interstate market, a small portion of which actually is sold in that state. Thus, of the estimated production tax revenue generated from this market, \$39.9 million (95%) is exported to consumers in other states.

With respect to the intrastate market for natural gas, there is no provision for automatically shifting production taxes forward to consumers. In fact, it appears that under the current interpretations of the Natural Gas Policy Act, such taxes on flowing gas in the intrastate market cannot be forward shifted unless it is authorized by specific contractual provisions. In the absence of such provisions, increased production taxes are borne by producers. In Wyoming, however, the dominant intrastate contracts do authorize a forward tax shift. All intrastate gas is sold within the state and about half of those sales are made to out-of-state owned industrial users selling in out-of-state markets. Hence, about 50% of the \$4 million in production taxes collected on intrastate gas are exported. Addition of the tax exportation estimates for the intrastate and interstate gas markets to the minor amount of tax exportation on natural gas liquids production (\$1.6 million) yields the figure given in Summary Table II. These considerations (i.e., the division of production between the intrastate and interstate markets, the extent forward shifting contractually allowed in the latter market, and the state of residence of producers and consumers) also are relevant to determining the extent of exportation of production taxes on natural gas by other western states. However, the provisions of the Natural Gas Policy Act of 1978 makes the exact calculations quite complex and difficult to generalize from one state to another.

6. Conclusions

The key findings of this study are:

- States with relatively high personal income tax rates, including New York, Minnesota, Wisconsin, and Michigan, were able to export hundreds of millions of dollars of their 1981 personal income tax burden. On the other hand, states with low personal income tax rates, including many in the Rocky Mountain region, must bear the cost of higher federal taxes, reduced government services, or the economically debilitating effects of greater deficit spending by the federal government.

- States levying corporate profits and industrial property taxes also are able to shift the burden of those taxes to residents of other states. Eastern and mid-western states including Michigan, Wisconsin, Ohio, Pennsylvania, Indiana, New Jersey and New York, which produce large volumes of manufactured goods, appear to be quite successful in this regard. These taxes are then imported by many Rocky Mountain states which purchase the manufactured goods (such as automobiles) produced in the east and midwest.

- California, Florida and New York all collect more than \$400 million annually by levying taxes on goods and services purchased by out-of-state tourists and business travelers.

- The minerals extraction industry in Wyoming, and many other western states for that matter, is dominated by national corporations which sell mainly in out-of-state markets and which are held largely by out-of-state stockholders. Therefore, regardless of whether the production taxes levied are shifted forward to consumers or backward to producers, they end up being almost entirely exported.

Figure 1a: Energy and Mineral Production

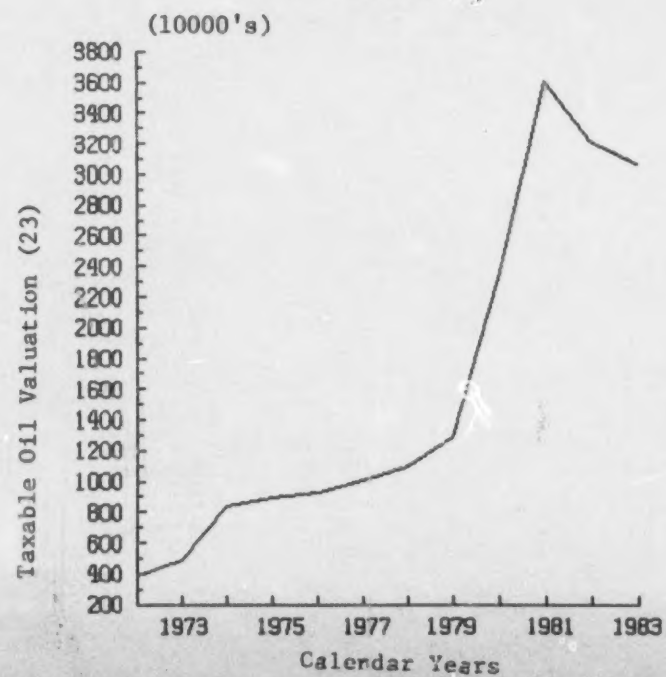
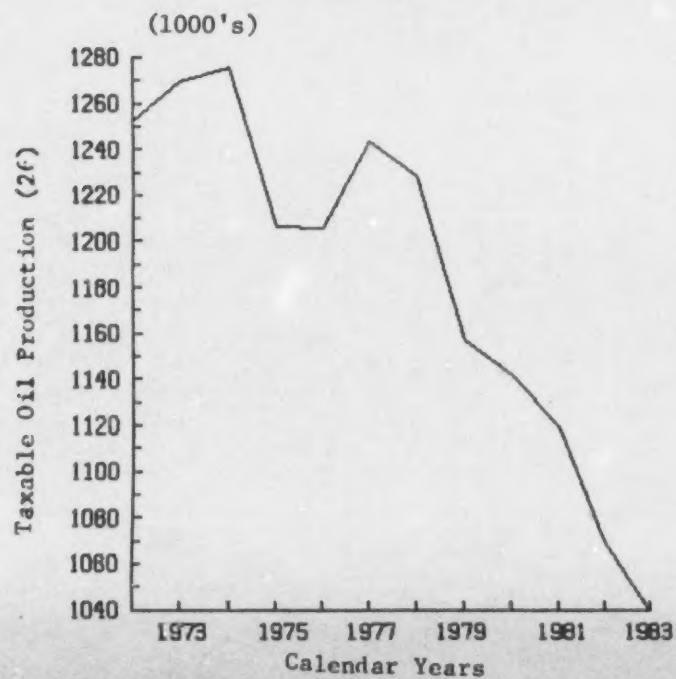
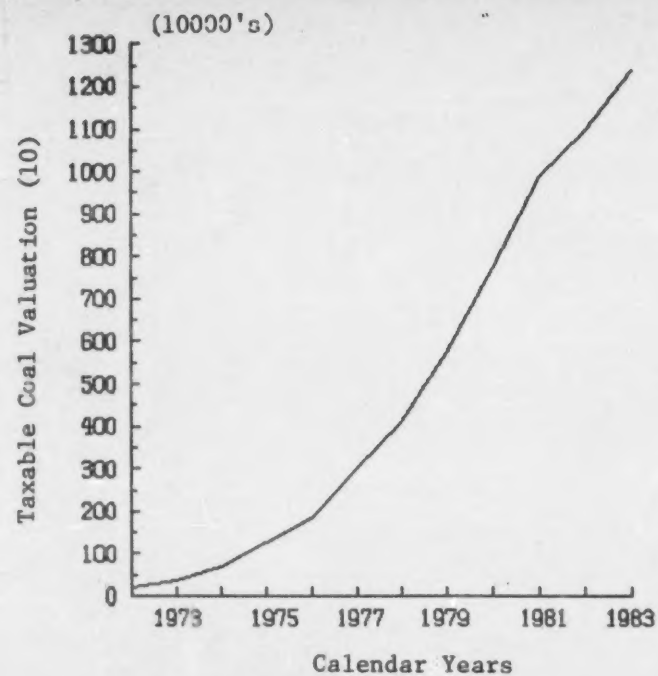
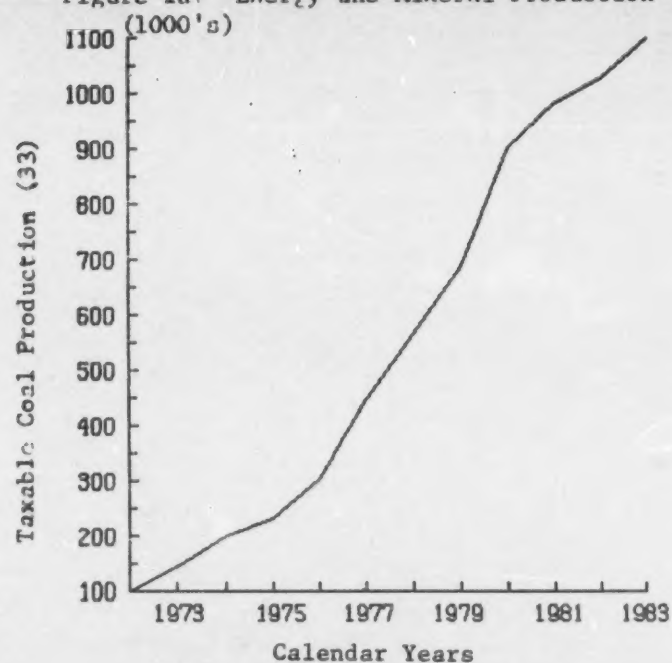


Table 1: Energy and Mineral Production¹

17

Calendar Quarters	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82
1. Wyoming Coal (12)	19897.	18487.	20630.	20297.	20799.	26148.	24574.	25108.	22069.	26586.	25809.	24257.
2. U.S. Coal (12)	204300.	200763.	212651.	193760.	216015.	206426.	145696.	235672.	216070.	219743.	209771.	194158.
3. Wyoming Oil (14)	313.	346.	349. ²	354.	361.	357.	358.	358.	359.	359.	358.	358.
4. U.S. Oil (14)	8600.	8676.	8629. ²	8565.	8554.	8583.	8548.	8166.	8387.	8642.	8650.	8640.
5. Wyoming Natural Gas (13)	1273.	1071.	1028.	901.	1232.	1358.	1717.	2073.	1421.	1418.	1426.	INA
6. U.S. Natural Gas (13)	57087.	58381.	54300.	51777.	55776.	56830.	55120.	54880.	54298.	55737.	51242.	INA
Calendar Years	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982 ³	1983 ³
7. Taxable Bentonite Production (33)	20623.	26148.	34226.	27609.	32788.	33158.	36267.	44792.	35847.	48050.	INA	INA
8. Taxable Bentonite Valuation (10)	27501.	44175.	56485.	53333.	67529.	79507.	105518.	151687.	124861.	208769.	INA	INA
9. Taxable Trona Production (33)	48935.	60300.	70606.	73798.	88006.	102156.	99742.	117720.	121592.	117877.	110000.	110000.
10. Taxable Trona Valuation (10)	171273.	227933.	335379.	442787.	616042.	786601.	797939.	1088909.	1389255.	1474176.	1375000.	1402500.
11. Taxable Coal Production (33)	100432.	142724.	199577.	231411.	302984.	445772.	564561.	687926.	905274.	984105.	1030000.	1100000.
12. Taxable Coal Valuation (10)	202202.	365254.	706585.	1246563.	1826418.	2997782.	4089067.	5720700.	7736337.	9896957.	10969500.	12408000.
13. Taxable Oil Production (26)	1252224.	1269433.	1275553.	1206300.	1205712.	1243289.	1227991.	1157180.	1141435.	1119126.	1070000.	1040000.
14. Taxable Oil Valuation (23)	38643.	48466.	83310.	89405.	92627.	100441.	109943.	126518.	231969.	361010.	321000.	306800.
15. Taxable Gas Production (27)	2854261.	2878182.	2656006.	2485289.	2607524.	2723006.	2737250.	3333222.	3495185.	3530761.	3750000.	4250000.
16. Taxable Gas Valuation (10)	457997.	563039.	650419.	888619.	1329257.	2236754.	2643893.	4561313.	6710874.	9785570.	12262500.	15810000.
17. Taxable Uranium Production (33)	23901.	25880.	27678.	27367.	33024.	39860.	55171.	55123.	53523.	45607.	27000.	26000.
18. Taxable Uranium Valuation (10)	267347.	244697.	194193.	208297.	418301.	662409.	731965.	692904.	809810.	772395.	363910.	34080.

Growing coal inventories throughout the nation have depressed output here in Wyoming, as well as nationwide. Compared to 2/82, Wyoming's 3/82 coal output fell 6.0 percent, while nationwide it fell 7.4 percent. Compared to 3/81, Wyoming and U.S. coal production is down 3.4 and 17.6 percent, respectively. The nationwide dip in production between 3/81 and 3/82 is exaggerated by the fact that 3/81 followed the long United Mine Workers strike, so that production was temporarily expanded to make up for some of the preceding quarter's shortfall. Wyoming's lost production (compared to 2/82) is not evenly distributed throughout the state. Production from the Powder River Basin coalfields continues to increase, although much more slowly than in previous years, while coal mines in southern Wyoming have been hard-hit by closures and severe production cutbacks.

The daily rate of oil production remains constant in Wyoming, and is down only barely (0.12 percent less in 3/82 than in 2/82) nationwide. The estimates of 2/82 Wyoming and U.S. natural gas production printed in the last WQU exceed the actual figures shown above by 8.8 and 5.4 percent, respectively. No data were available at press time from which to estimate 3/82 gas production.

Statistics for 1981 taxable mineral production and assessed valuation have just been published by the Wyoming Department of Revenue and Taxation. In addition, consensus projections of future production and valuation have been made available by the state Legislative Service Office (LSO). The projections are made for the purpose of estimating future mineral tax revenues, and so should be viewed as somewhat conservative. Taxable production makes 100, 94, 96, 80, 90 and 100 percent of bentonite, trona, coal, oil, natural gas, and uranium production, respectively.

In 1981, bentonite production rebounded from the decline experienced in 1980 to just beyond the previous high recorded in 1979. In 1981, bentonite production was 34.0 percent higher than in 1980, and over the same period assessed valuation increased 67.2 percent. LSO did not publish a separate projection for bentonite. Trona production was off 3.1 percent from its 1980 peak, while valuation increased 6.1 percent. No significant change in trona production or valuation is projected.

Coal production was 8.7 percent higher in 1981 than in 1980. Even under current adverse economic conditions, statewide coal output is expected to increase 11.8 percent between 1981 and 1983. With the expected increase in prices, valuation is projected to rise 25.4 percent between 1981 and 1983. That follows a single-year increase in valuations of 27.9 percent between 1980 and 1981.

Oil production is expected to continue to decline gradually, and in 1982 assessed valuation is expected, for the first time, to follow suit. Even with production falling by 2.0 percent between 1980 to 1981, assessed valuation rose by 55.6 percent, largely due to the price increases which followed the decontrol of prices early in 1981. Later in 1981 and through April, 1982 prices fell, subsequently rising again slightly through the early summer. Little or no change in real crude oil prices is expected (by LSO) in the foreseeable future. Thus, with gradually declining output levels, the 1983 assessed valuation of Wyoming's oil production is projected to be 15.0 percent less than in 1981. Of course those projections are predicated on maintaining the status quo in the Middle East, an area not known for its stability. If the Iraqis and Iranians stop fighting and are able to quickly bring production back to previous peak output levels, then in the absence of production cuts by other OPEC Members, prices would fall below the current projected level. On the other hand, a new Middle East war or internal strife within a major oil producing nation would greatly increase crude oil prices.

Even the conservative LSO projections see natural gas production and prices rising substantially for the foreseeable future. Many new southwest Wyoming gasfields are preparing to begin production, and with price decontrol in 1985, higher prices are expected. In 1981, production and valuation of natural gas were 1.0 and 45.8 percent, respectively, higher than in 1980. By 1983, respective increases of 20.4 and 61.6 percent (compared to 1981) are projected.

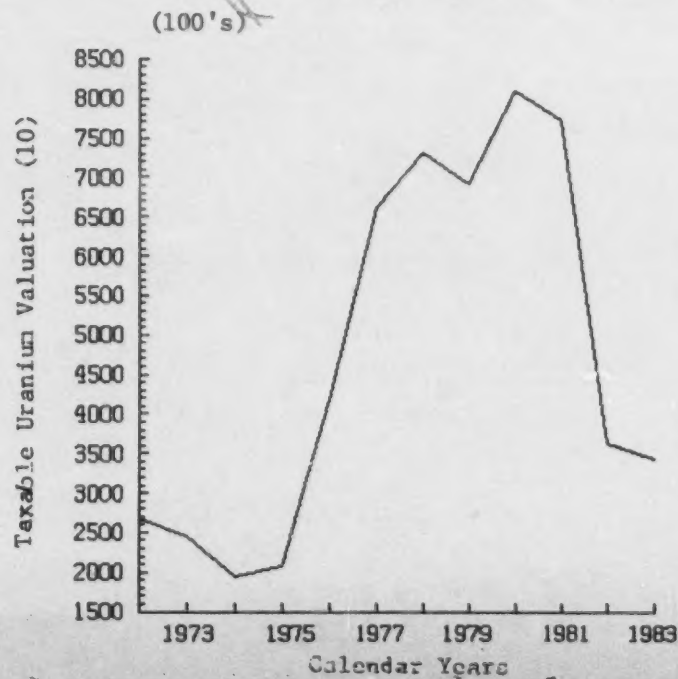
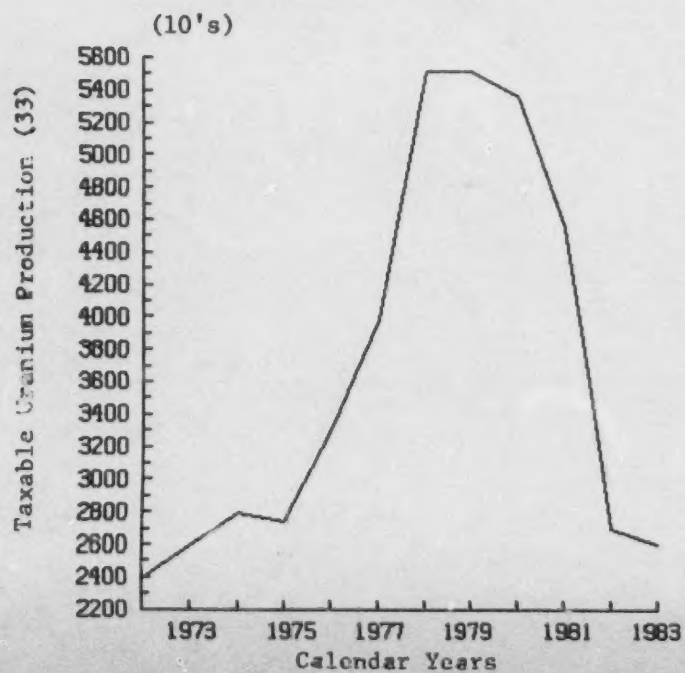
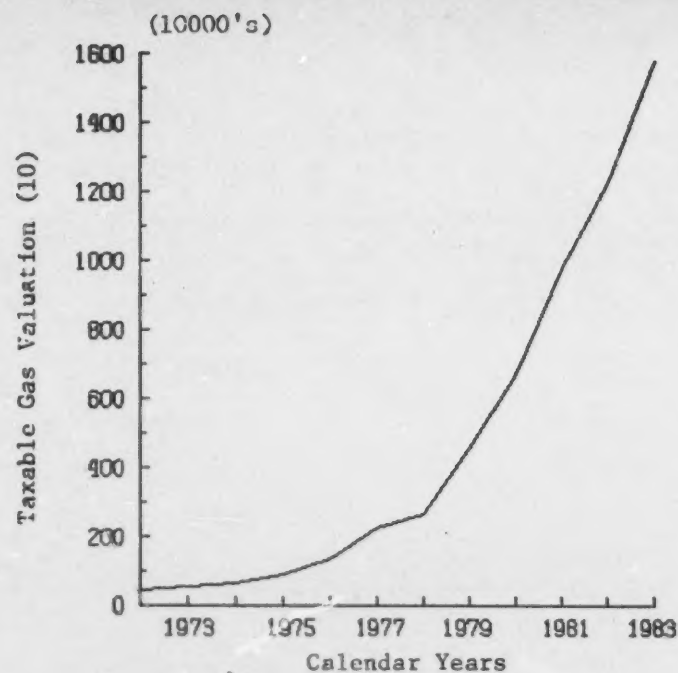
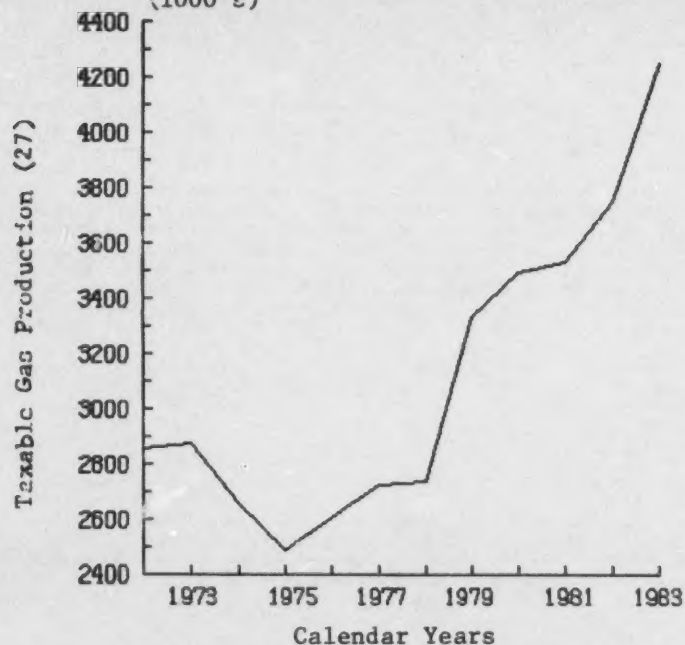
Uranium production and assessed valuation during 1982 is expected to be at least half the level attained in 1978. There is very little, if any, hope that the status quo can be altered significantly before 1986. Current high inventories of uranium will be drawn down enough by 1986 to push up production and prices.

¹First-time readers of WQU should refer to the "Format" page for an explanation of numerical codes and table formats.

²Datum shown is an estimate. Some data components are unavailable.

³The latest consensus projections of the Wyoming Legislative Service Office.

Figure 1b: Energy and Mineral Production
(1000's)



COAL, OIL, AND GAS SEVERANCE AND AD VALOREM TAX LEVIES (1000's of dollars)*

	1976		1977		1978		1979		1980		1981		1982	
	Severance	Ad Valorem	Severance	Ad Valorem	Severance	Ad Valorem	Severance	Ad Valorem	Severance	Ad Valorem	Severance	Ad Valorem	Severance	Ad Valorem
Coal ¹	\$ 5984	\$ 7321	\$17716	\$11217	\$30278	\$18962	\$42935	\$26552	\$60128	\$37216	\$103918	\$ 48882	\$115180	\$ 65921
Oil ²	34781	52011	35958	56581	38603	61493	42594	70047	48843	8128	21221	141068	188760	221423
Natural Gas ³	3554	5416	5317	8363	8947	14157	10576	16952	18245	29196	58704	42835	73575	62549

*Tax levies are based on the previous year's production.

¹Severance tax was 4 percent in 1976, 9.7 percent in 1977, 10.1 percent in 1978, and 10.5 percent since 1979.

²Severance tax was 2 percent for Stripper Oil and 4 percent for Crude Oil until 1981. It is currently 4 percent for Stripper Oil and 6 percent for Crude Oil, as a result of a decision asserted by the 1981 Legislature.

³Severance tax was 4 percent until 1982. It is currently 6 percent.

CONSENSUS PROJECTIONS FOR MINERAL PRODUCTION AND VALUATION

	1984	1985	1986
Coal			
Production (thousands of tons)	118000.	125000.	128000.
Valuation (thousands of dollars)	1407740.	1582500.	1710080.
Oil			
Production (thousands of barrels)	101000.	98000.	95000.
Valuation (thousands of dollars)	2929000.	2842000.	2755000.
Natural Gas			
Production (thousands of MCF)	485000.	500000.	520000.
Valuation (thousands of dollars)	2114600.	2485000.	2745600.
Uranium			
Production (thousands of tons)	2600.	2800.	3300.
Valuation (thousands of dollars)	34600.	37789.	53104.
Trona			
Production (thousands of tons)	12000.	13000.	14000.
Valuation (thousands of dollars)	156000.	72900.	190400.

Source: Taxes on Wyoming's Minerals: History and Projections (September, 1982), prepared by the Legislative Service Office.

Figure 2: Agriculture

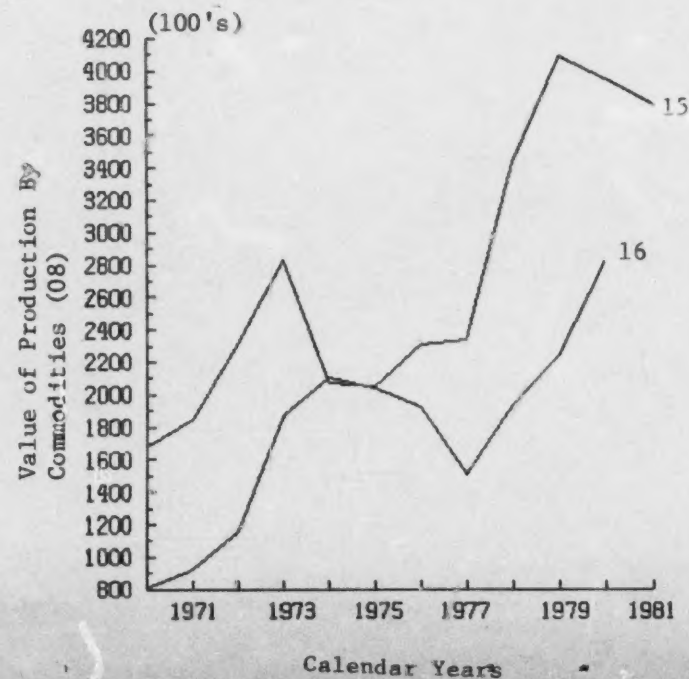
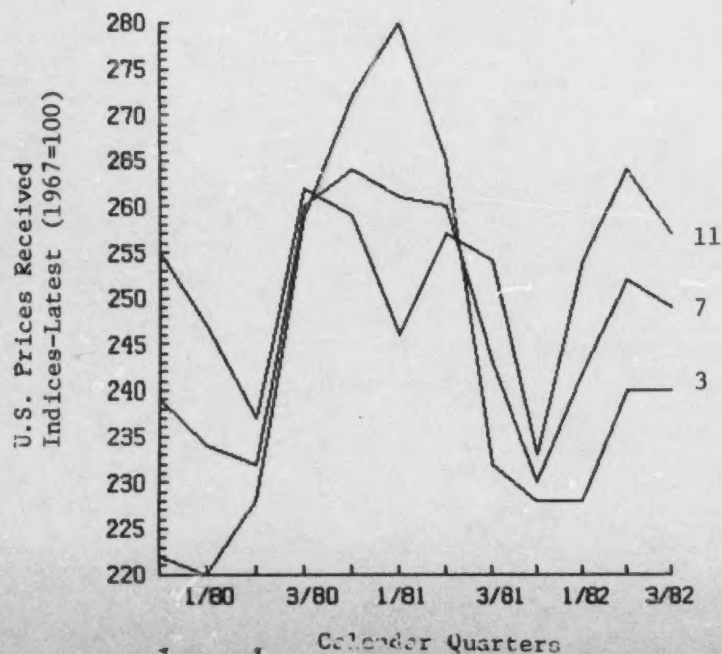
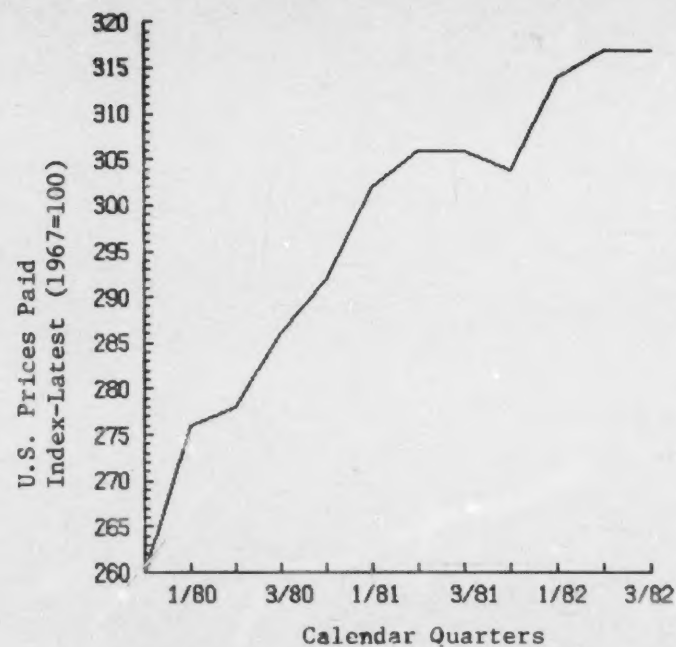
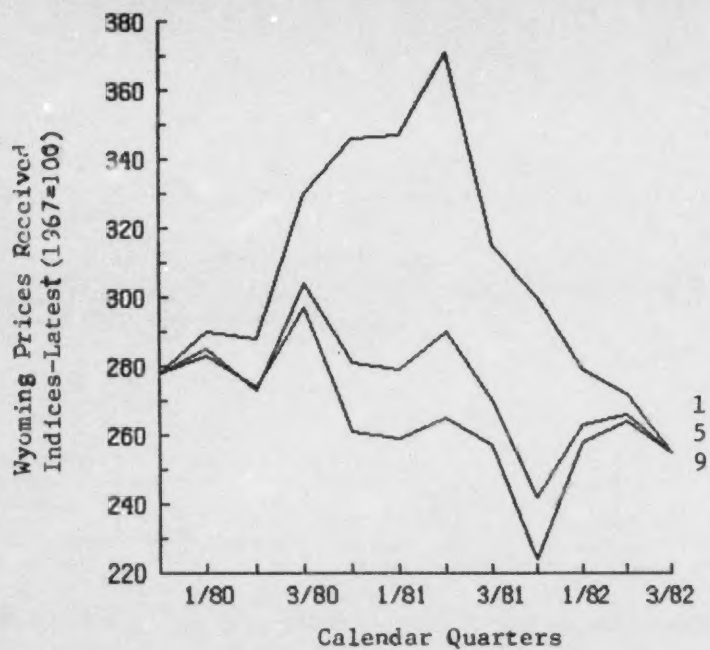


Table 2: Agriculture

Calendar Quarters	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82
Price Indices¹ (1967=100)												
1. Wyoming Crops, Prices Received - Latest	278.	290.	288.	330.	346.	347.	371.	315.	300.	279.	272.	255.
2. Wyoming Crops, Prices Received - Average	259.	279.	282.	308.	316.	350.	347.	325.	300.	283.	273.	256.
3. U.S. Crops, Prices Received - Latest	222.	220.	228.	259.	272.	280.	265.	232.	228.	228.	240.	240.
4. U.S. Crops, Prices Received - Average	224.	221.	223.	251.	267.	278.	271.	249.	245.	234.	238.	238.
5. Wyoming All Commodities, Prices Received - Latest	278.	285.	273.	304.	281.	279.	290.	270.	242.	263.	266.	255.
6. Wyoming All Commodities, Prices Received - Average	281.	281.	273.	285.	281.	277.	284.	267.	250.	248.	266.	251.
7. U.S. All Commodities, Prices Received - Latest	239.	234.	232.	260.	264.	261.	260.	243.	230.	242.	252.	249.
8. U.S. All Commodities, Prices Received - Average	238.	237.	229.	255.	263.	263.	260.	252.	234.	241.	250.	249.
9. Wyoming Livestock, Prices Received - Latest	278.	283.	274.	297.	261.	259.	265.	257.	224.	258.	264.	255.
10. Wyoming Livestock, Prices Received - Average	288.	282.	272.	282.	274.	255.	266.	250.	235.	238.	264.	250.
11. U.S. Livestock, Prices Received - Latest	255.	247.	237.	262.	259.	246.	257.	254.	233.	254.	264.	257.
12. U.S. Livestock, Prices Received - Average	251.	251.	234.	259.	261.	250.	251.	256.	240.	247.	262.	259.
13. Prices Paid by U.S. Farmers - Latest	260.	276.	278.	286.	292.	302.	306.	306.	304.	314.	317.	317.
14. Prices Paid by U.S. Farmers - Average	258.	273.	276.	284.	291.	300.	305.	306.	305.	313.	315.	316.
Calendar Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Value of Production, Wyoming												
15. Total Livestock and Products (08)	167860.	185160.	231153.	282237.	207391.	204606.	230627.	233926.	342814.	408948.	395565.	379039.
16. Total Crops (08)	80563.	92257.	116020.	186774.	210896.	203684.	192376.	150891.	192887.	224648.	287799.	INA ²

All prices received by Wyoming farmers and ranchers were either down or remained constant in the third quarter of 1982 over the same period in 1981. Statistics show that the average prices received changed by the following percentages during the past twelve months: all crops - down 21.23 percent, all commodities - down 6.0 percent, and; livestock - remained constant. September, 1982 prices (the latest prices received) also indicated decreases. The possible contributing factor to this downward trend is over-production, which keeps the prices low. According to the October 22, 1982 issue of the biweekly agricultural statistics prepared by the Wyoming Crop and Livestock Reporting Service, record harvests are anticipated this year for Wyoming hay; therefore, price indices for all crops are not likely to improve during 82.

Nationwide, farmers and ranchers fared better in 3/82.

While the average prices received for all crops and all commodities decreased below 3/81, the latest prices increased by 3.4 percent and 2.47 percent, respectively. Both the average and latest prices received for livestock increased during 3/82.

The value of agricultural commodities produced in the state during 1980 was slightly over \$678 million, with 58.31 percent of the total coming from livestock, and 41.69 percent coming from crops. Livestock and crop receipts are up 135.7 and 251.0 percent, respectively, compared to 1980.

¹The index for the last month (latest) of each quarter, along with the average of the three monthly indices of each quarter.

²The sugar beet average price, included in the total, will not be available until January, 1983.

Figure 3: Tourism
(1000's)

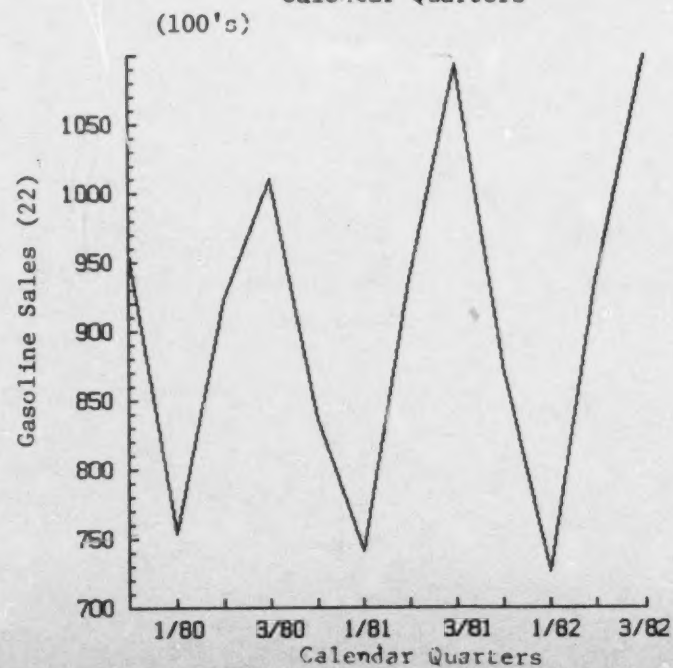
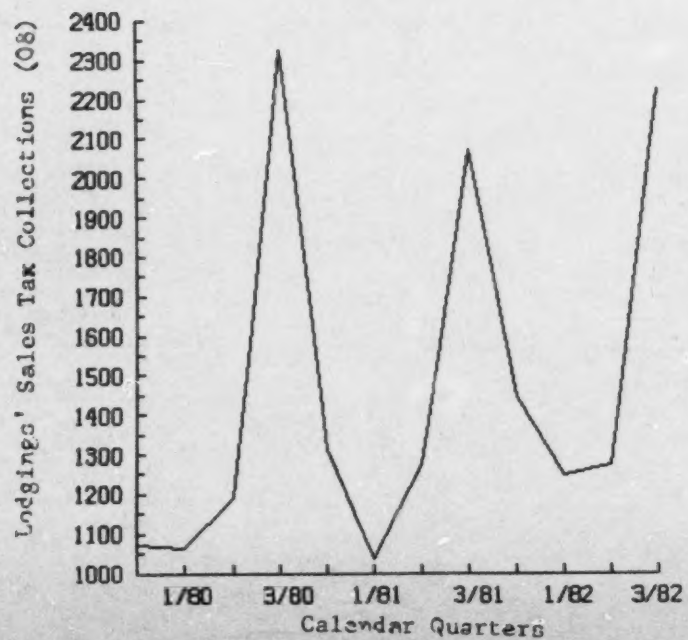
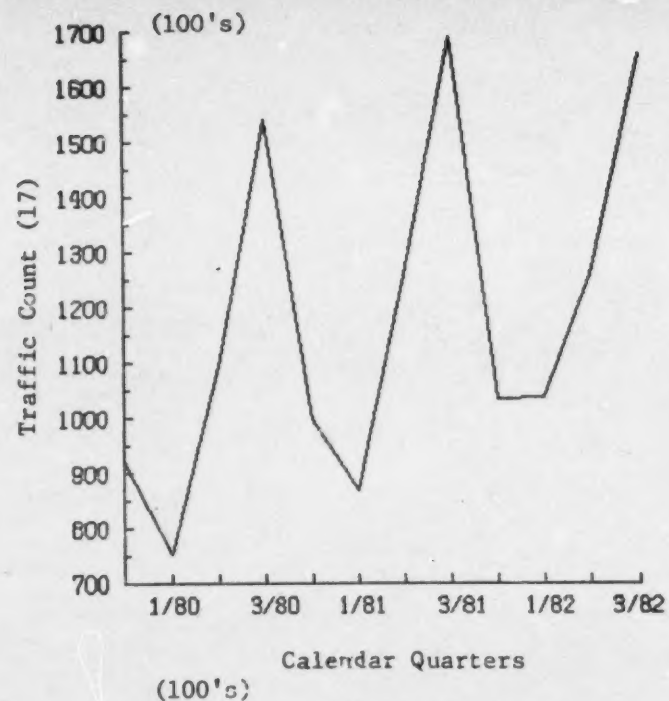
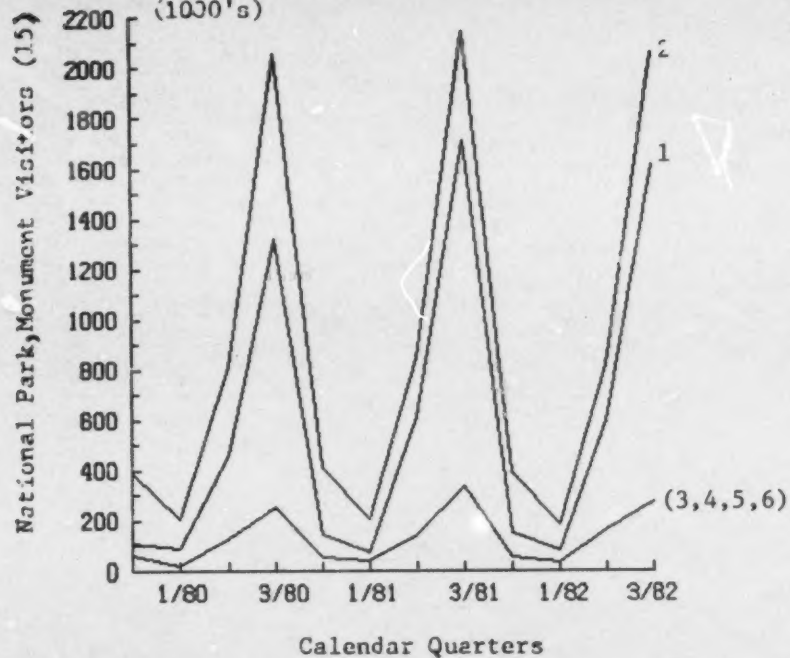


Table 3: Tourism

Calendar Quarters	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82
<u>National Parks and Monuments</u>												
1. Yellowstone (15)	112061.	89609.	459974.	1323837.	144039.	74693.	609642.	1715175.	149682.	82758.	600071.	1614242.
2. Grand Teton (15)	389457.	205415.	814813.	2055989.	412817.	206147.	847464.	2147775.	393843.	185935.	820236.	2066704.
3. Devil's Tower (15)	12606.	7600.	51992.	144042.	12346.	13425.	63064.	205660.	18159.	9425.	86305.	161989.
4. Fossil Butte (15)	1404.	91.	2864.	6857.	1421.	339.	3795.	7769.	1018.	596.	6691.	10303.
5. Fort Laramie (15) ¹	7236.	3630.	27621.	52608.	6337.	6309.	40192.	64598.	10190.	5037.	31447.	51881.
6. Bighorn NRA-South (15)	37334.	10564.	45481.	49499.	35422.	18509.	34846.	567566.	27820.	17701.	42059.	53379.
<u>Other Tourism Indicators</u>												
7. Traffic Count (17)	92168.	75203.	109530.	154224.	99772.	86957.	125992.	169095.	103438.	103864.	126037.	166170.
8. Hotel, Motel, and Camp Sales Tax (08)	1074.	1064.	1189.	2326.	1315.	1036.	1272.	2073.	1447.	1247.	1273.	2226. ²
9. Gasoline Sales (22)	95742.	75338.	92212.	101005.	83626.	74027.	93721.	109335.	87500.	72548.	93556.	110,000. ²

Tourism indicators, though down compared to previous years, are surprisingly strong considering the length and severity of the nationwide economic slump. In fact during 3/82, one indicator, sales tax collections by hotels, motels, and campgrounds, showed an increase (7.4 percent) compared to 3/81. However, compared to pre-recession 3/80, 3/82 sales tax collections by lodging establishments fell 4.3 percent; in real terms a decrease of 17.67 percent. During 3/82 visitation at Wyoming's top attractions, Yellowstone and Grand Teton National Parks, fell 5.9 and 3.8 percent, respectively, compared to 3/81. Compared to the record-setting pace of 3/78, visitation at the respective parks was off 9.6 and 21.3 percent. Combined, 3/82 visitation at the other National Park Service attractions (Series 3-6 above) fell 17.1 percent compared to 3/81.

Actual gasoline sales (in gallons) in 2/82 exceeded the estimate published in the last WQU by 4.0 percent. The estimate for 3/82 indicates an increase of 17.6 percent over the previous quarter, but virtually no more gallons sold than during 3/81. The traffic count for selected recording stations during 3/82 was almost unchanged from 3/81. A decline of only 1.7 percent was observed.

Wyoming's tourism-related enterprises are likely to be the first to feel the expected turnaround in the nation's economy. The variety of adverse economic conditions which have plagued the nation from 1979 to 1982 have undoubtedly thwarted the plans of many would-be Wyoming visitors. That pent-up demand will bolster Wyoming's economy next summer if a recovery materializes before then.

¹Big Horn Canyon N.R.A. is only partially in Wyoming. Only visitation data for the Wyoming part is shown.

²Estimate based on trend and first two months of the quarter.

Figure 4. Employment and Labor
(100's)

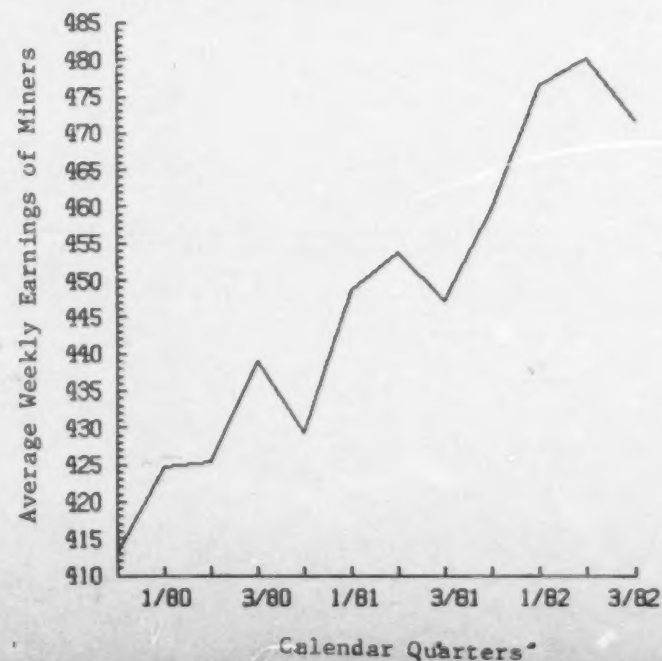
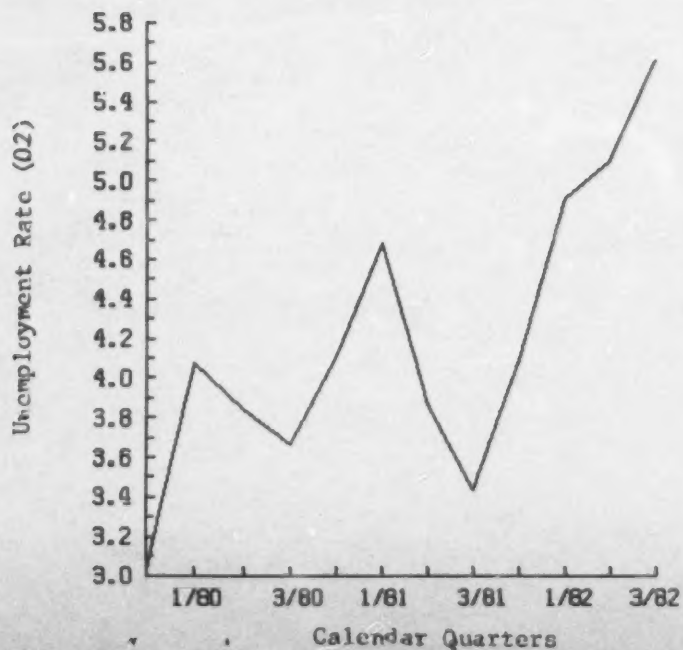
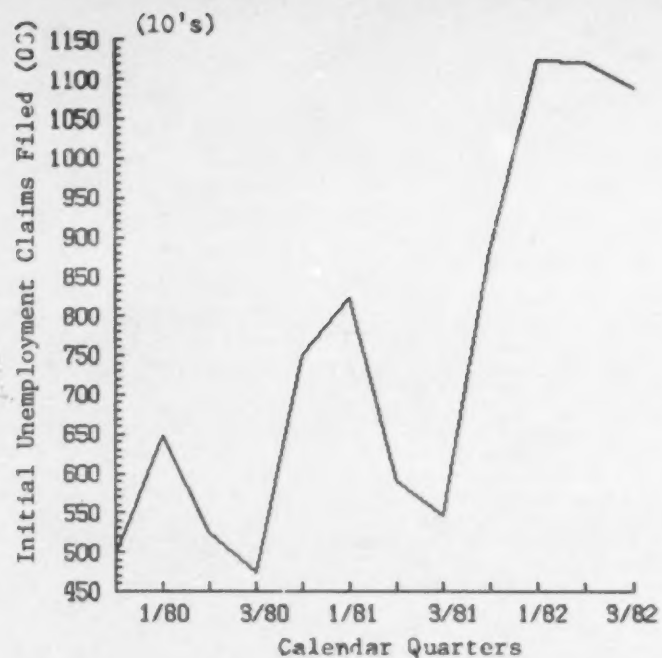
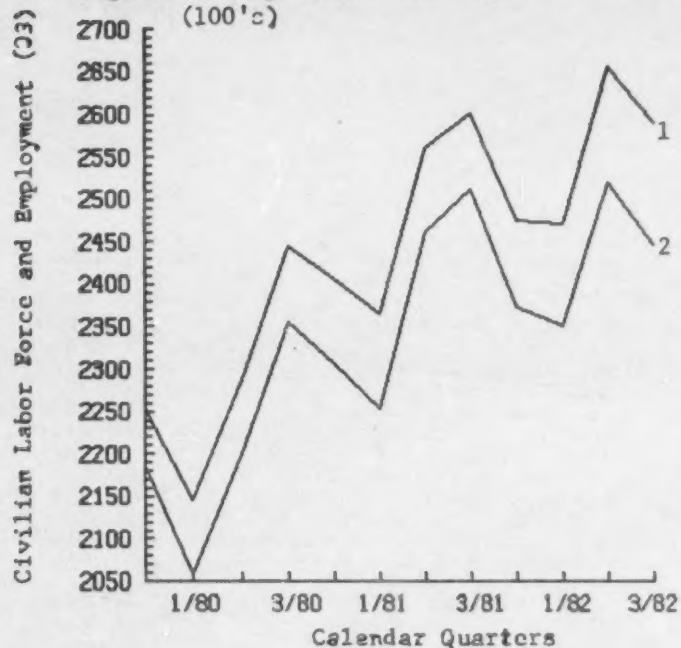


Table 4: Employment and Labor¹

Calendar Quarters	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82
1. Civilian Labor Force (03)	225379.	214579.	228869.	244355.	240566.	236480.	255956.	260041.	247523.	247185.	265559.	259182.
2. Employment (03)	218571.	205831.	220080.	235404.	230685.	225414.	246075.	251110.	237402.	235065.	252028.	244650.
3. Unemployment (03)	6809.	8748.	8789.	8951.	9881.	11066.	9881.	8931.	10121.	12119.	13531.	14532.
4. Unemployment Rate (02)	3.0	4.1	3.8	3.7	4.1	4.7	3.9	3.4	4.1	4.9	5.1	5.6
5. Initial Claims Filed (03)	4977. ²	6466.	5242.	4745.	7494.	8231.	5901.	5463.	8837. ³	11237.	11225.	10894.
6. Applications Received (03)	8300. ²	10263.	12481.	12727.	9584.	13026.	13522.	13884.	10000. ³	12070.	14838.	15359.
7. New Non-Agricultural Openings (03)	9000. ²	7126.	9217.	11068.	7526.	6912.	9903.	12991.	6300. ³	6119.	8344.	9190.
8. New Non-Agricultural Placements (03)	8100. ²	6211.	7848.	9218.	6482.	5649.	7681.	10072.	5850. ³	5138.	7161.	8079.
9. Miner's Average Weekly Hours	43.7	42.7	42.9	44.1	43.3	43.8	42.8	41.5	42.5	42.0	41.7	39.7
10. Miner's Average Weekly Earnings (05)	413.16	424.77	425.31	438.97	429.26	446.66	453.75	447.13	459.64	476.53	480.37	471.92
11. Miner's Average Hourly Wage (05)	9.45	9.94	9.91	9.95	9.91	10.24	10.61	10.78	10.81	11.34	11.52	11.89

A slow-down in energy development, combined with non-seasonal lay-offs and company shutdowns has prevented statewide employment growth in recent months. Wyoming's labor force, which usually records an increase during the third quarter, decreased 2.40 percent below 2/82. Workers still outnumber the jobs available, evidenced by the figures for employment and unemployment. The 5.6 unemployment rate is still well below the national jobless rate of 9.8-10.1 during 3/82, but is nevertheless a record high for this period. One note of promise is that the September rate was down slightly from the August employment rate of 5.8 percent, the highest recorded in the state since March 1971. In addition, this decrease occurred at the same time the Labor Department announced the national rate broke the double-digit barrier for the first time since the Great Depression.

Despite obvious deterioration in economic conditions other employment figures do not illustrate the lapse. Joblessness during 3/82 was not reflected in the number of new unemployment claims filed. While the number of claims has drastically increased within the past year, 3/82 marked a period with a 2.9 percent decrease in claims. Applications increased over the third quarter; however, new non-agricultural openings and non-agricultural placements increased at great rates--3.51, 10.14, 12.82 percent, respectively.

Third quarter labor statistics for mining continued this year's trend of decreasing weekly hours and increasing hourly wages. Despite this relationship, miner's average weekly earnings were down 1.76 percent during 3/82.

¹The most recent year's data are preliminary.

²Estimated. October 1979 data are not available.

³Estimated. October and November 1981 data are not available.

Figure 5. Business Conditions

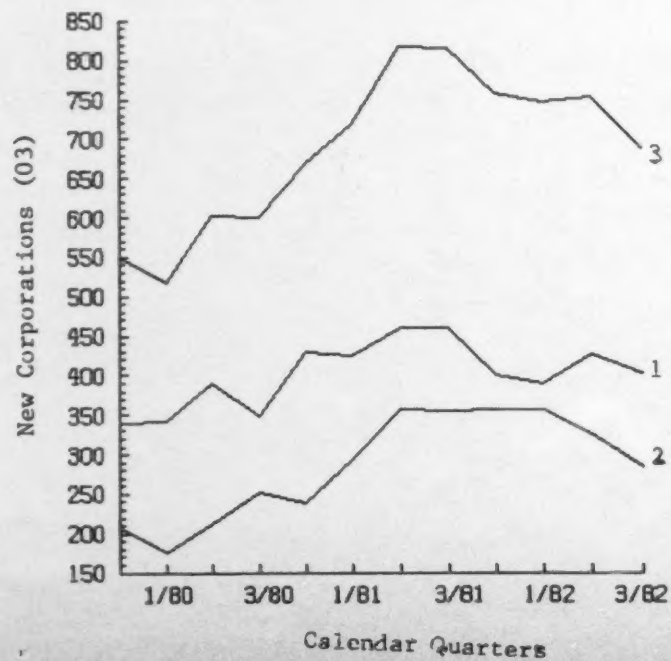
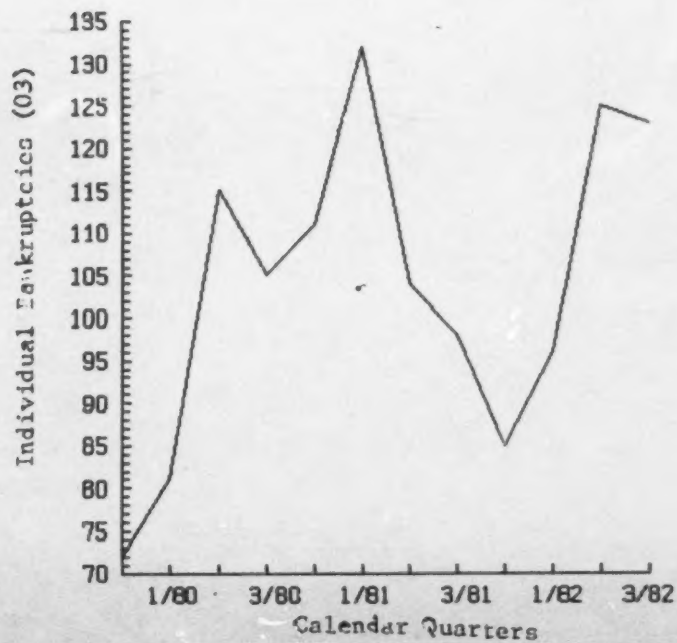
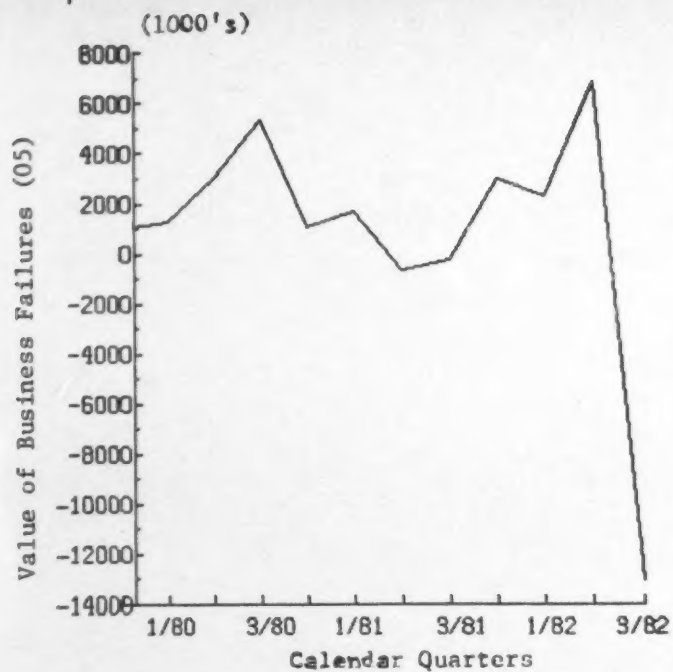
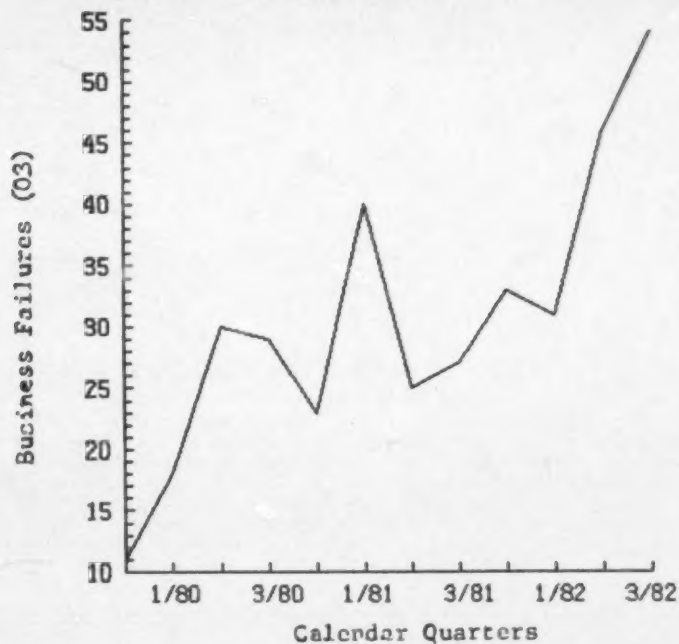


Table 5: Business Conditions

Calendar Quarters	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82
1. New Domestic Corporations (03)	340.	342.	391.	348.	429.	424.	459.	459.	400.	389.	428.	403.
2. New Foreign Corporations (03)	209.	175.	212.	252.	239.	294.	357.	356.	358.	357.	326.	285.
3. Total New Corporations (03)	549.	517.	603.	600.	668.	718.	816.	815.	758.	746.	754.	688.
4. Business Failures (03)	11.	18.	30.	29.	23.	40.	25. ¹	27.	33.	31.	46.	54. ¹
5. Value of Business Failures (05)	1020739.	1294403.	3020063.	5306348.	1054339.	1674135.	-635217. ¹	-240995. ¹	2987139.	2331991.	6842595.	-13034324. ¹
6. Personal Bankruptcies (03)	72.	81.	115.	105.	111.	132.	104.	98.	85.	96.	125.	123.]

Spurred primarily by falling interest rates, most observers say the recession has touched bottom and started into recovery. However, it takes a while for statistics to translate into sales, and businesses continued to sink through the floor during the third quarter of 1982. Business failures displayed a 17.39 percent increase over 2/82 and a 100 percent rise above one year ago during the same period. The dollar value of these bankruptcies indicates that assets greatly exceeded liabilities. The immense 90.49 decrease in the 3/82 value of business failures over 2/82 is associated with a single firm whose assets exceeded liabilities by over \$18 million.

On an individual level, the number of bankruptcies decreased for the period of 3/82. More specifically, the change from 2/82 to 3/82 represented a 1.6 percent decrease. However, when comparing 3/82 to 3/81, a 25.51 percent increase in the number of individual bankruptcies is indicated.

Evidence of economic recovery is also not seen in the change of statistics for new corporations. Figures for the total number of new corporations registered demonstrated an 8.75 percent decrease in 3/82 below 2/82, resulting from decreases of 5.84 and 12.58 percent in new domestic and foreign corporations, respectively.

¹ Assets exceed liabilities

Figure 6: Construction

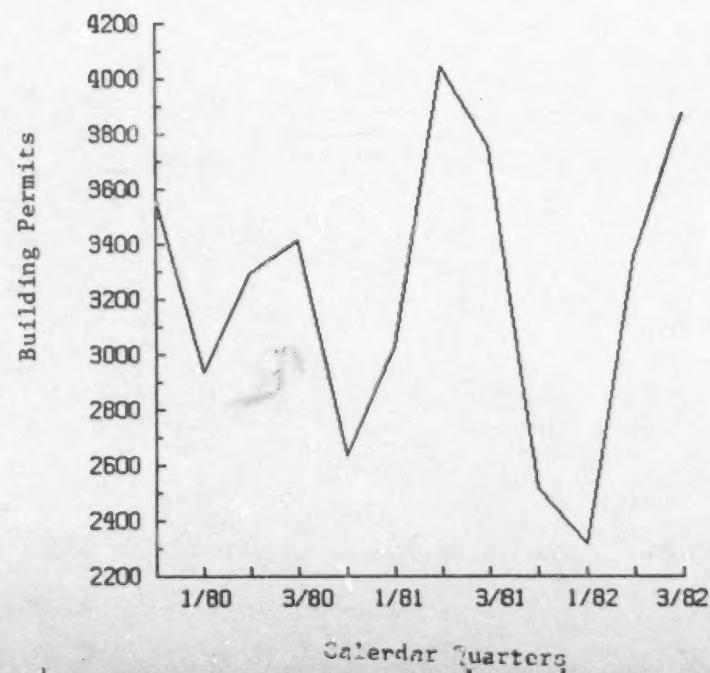
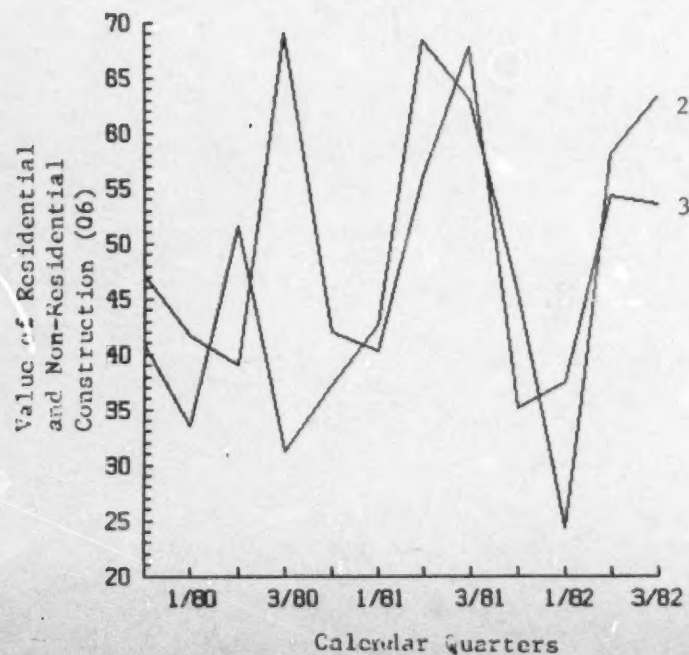
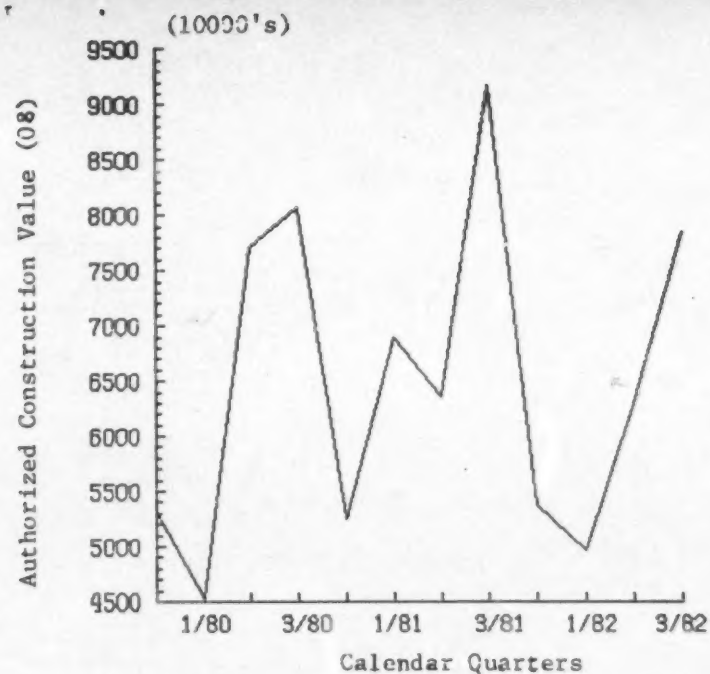
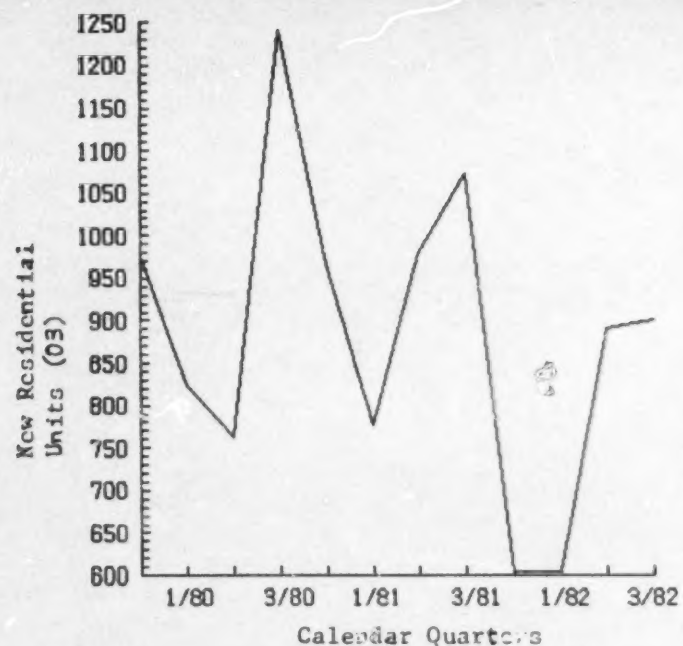


Table 6: Construction¹

Calendar Quarters	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82
1. New Residential Dwelling Units (03)	976.	824.	762.	1240.	965.	777.	978.	1072.	605.	604.	891.	900.
2. Value of Residential Dwellings Constructed (06)	47.1	41.6	39.0	69.0	42.0	40.2	56.1	67.8	35.1	37.4	54.3	53.6
3. Value of Nonresidential Construction (06)	40.9	33.6	51.5	31.2	37.2	42.6	68.5	62.1	45.6	24.3	58.1	63.2
4. Building Permits Issued in Selected Wyoming Cities (03)	3560.	2934.	3293.	3414.	2637.	3027.	4040.	3755.	2516.	2317.	3353.	3992.
5. Value of Authorized Construction (08)	53215.	45371.	77045.	80648.	52550.	68995.	63557.	91789.	53839.	49768.	62939.	89434.

The ongoing slump in the nation's housing industry has received a great deal of publicity. Wyoming's own housing industry has also suffered, but the cutbacks are not as severe as nationwide. Normally the most recent quarter's data is contrasted with the preceding quarter, and the same quarter a year ago, but with construction activity well below the historical trend, such comparisons are becoming less interesting. Data for 3/82 show some normal seasonal upswing in activity, but only the nominal value of non-residential construction is higher in 3/82 (1.8 percent). In real terms all five categories show a decrease over a year ago.

A more interesting story is the change in income, population, and construction activity from three years ago. Compared to the year beginning October, 1978, the number of new dwelling units constructed from October, 1981 to September, 1982 is down 44.6 percent. In spite of periods of double-digit inflation between 1979 and 1982, the value of residential construction between October, 1981 and September, 1982 was 26.4 percent less than for the same period three years earlier. During the same time, the value of non-residential construction rose only 22.6 percent. Non-residential construction includes energy development-related items such as pipelines, gas "sweetening" plants, power plants and refineries. Since the rate of inflation specific to construction varies considerably from place to place and is not well approximated by the overall rate of inflation, the exact change in real terms cannot be calculated. However, it seems certain that, overall, construction is down in real terms. What makes that particularly noteworthy is that Wyoming's 1982 population is estimated to be 12.8 percent higher than in 1979, and over the same period real personal income rose 8.5 percent. Those data suggest a substantial backlog of demand that would be tapped by lower interest rates.

In fact, long-term interest rates are finally beginning to respond to the stimuli which have already produced a substantial decline in short-term rates. Given the seasonality of construction, it may take at least through next summer before lower interest rates can be fully reflected in increased construction activity.

¹Numbers appearing in this table may differ slightly from source data due to summing of rounded data.

Figure 7: Utilities
(100's)

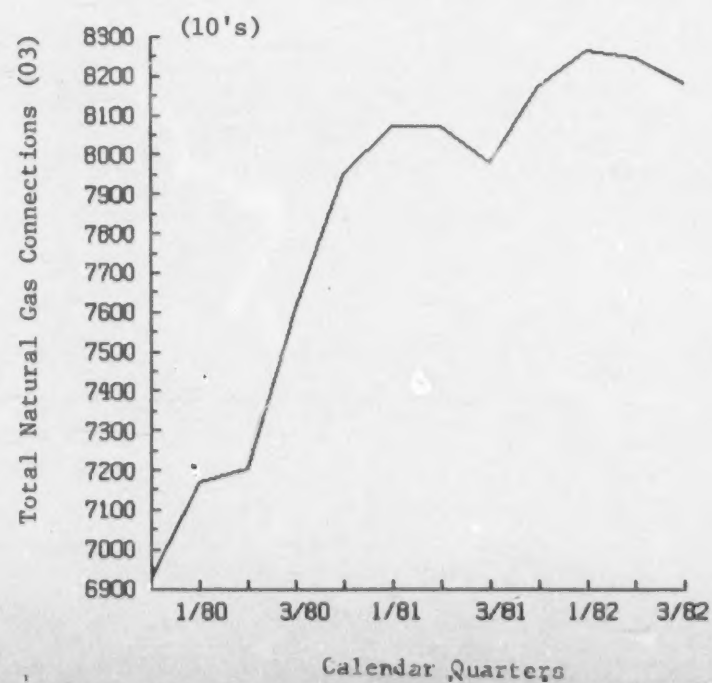
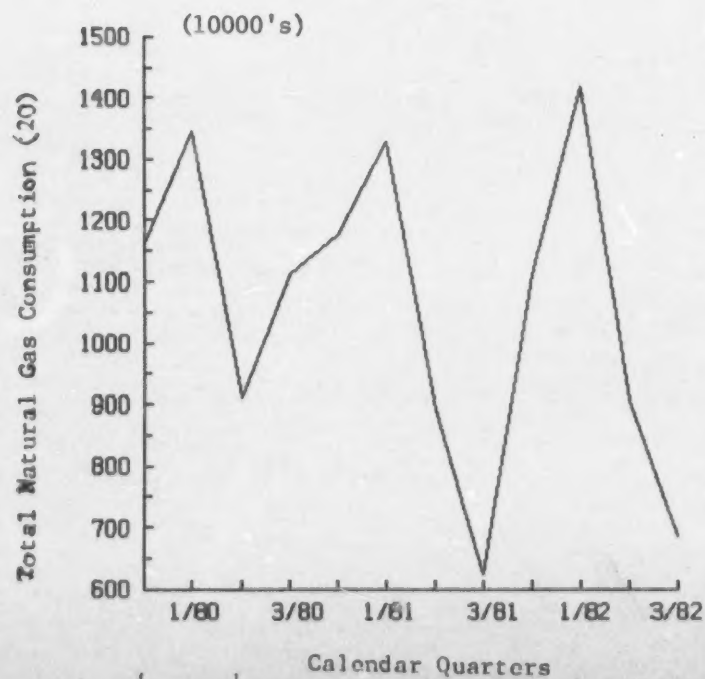
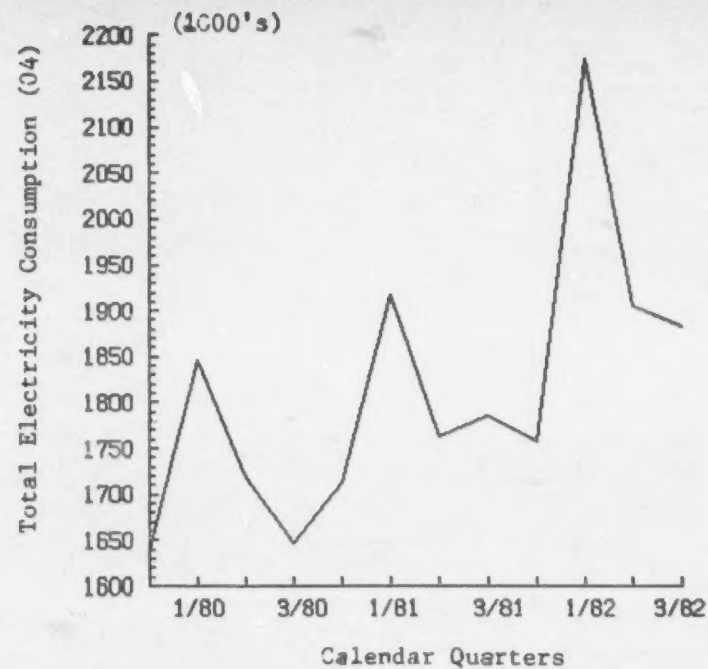
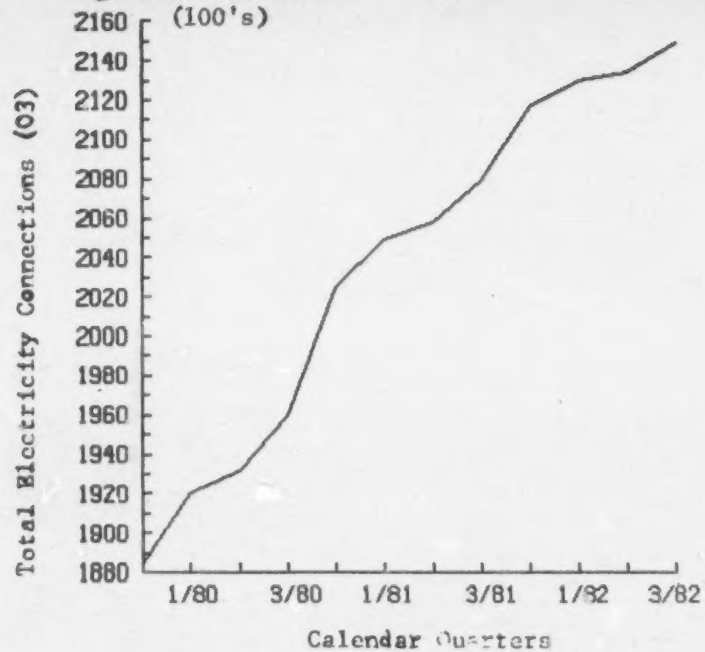


Table 7: Utilities¹

31

Calendar Quarters	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82
1. Residential Electric Connections (03)	154682.	157183.	158424.	160950.	166342.	168477.	169494.	169777.	174369.	174018.	174126.	177081.
2. Residential Electric Consumption (04)	335770.	430258.	319866.	264960.	335159.	487386.	331256.	782226.	218361.	504636.	375401.	302786.
3. Commercial Electric Connections (03)	27071.	27208.	27772.	28072.	28847.	29465.	29605.	30522.	30047.	30833.	31086.	30841.
4. Commercial Electric Consumption (04)	265711.	282677.	267804.	287954.	271561.	298580.	288617.	317998.	303091.	354594.	319679.	331351.
5. Industrial Electric Connections (03)	2891	2891.	2957.	3057.	3312.	3377.	3384.	3484.	3590.	3581.	3451.	3702.
6. Industrial Electric Consumption (04)	986892.	1092324.	1096646.	1013672.	1049382.	1100964.	1097628.	1112398.	1156967.	1266782.	1179112.	1178792.
7. Other Connections ² (03)	3794.	4743.	3986.	3875.	3946.	3579.	3266.	4102.	3652.	4520.	4778.	3243.
8. Other Consumption (04)	51980.	40623.	34114.	80540.	55639.	30333.	45006.	72994.	79409.	48237.	31570.	70139.
9. Residential Natural Gas Connections (03)	62977.	65346.	65731.	69297.	72468.	73699.	73712.	72966.	74828.	75677.	75413.	74861.
10. Residential Natural Gas Consumption (04)	2556825.	4236345.	2311300.	787701.	2770400.	3923502.	2180779.	814900.	2499236.	4607468.	2504865.	872772.
11. Commercial Natural Gas Connections (03)	5997.	6095.	6026.	6360.	6561.	6595.	6557.	6385.	6393.	6482.	6552.	6452.
12. Commercial Natural Gas Consumption (04)	1132437.	1872572.	976489.	347976.	1125956.	1766515.	970295.	382137.	943319.	1955899.	1075767.	385052.
13. Industrial Natural Gas Connections (03)	87.	87.	97.	91.	93.	92.	94.	90.	89.	89.	90.	90.
14. Industrial Natural Gas Consumption (04)	7734080.	6428686.	5564123.	9887644.	7647357.	7345317.	5607535.	4959825.	7479593.	73289389.	5335475.	5564715.
15. Other Natural Gas Connections (03)	222.	189.	216.	342.	363.	348.	344.	349.	398.	400.	404.	409.
16. Other Natural Gas Consumption	209720.	905798.	261674.	98459.	204268.	252249.	147575.	87695.	196349.	299920.	134722.	44697.
17. Business Telephone Connections (03)*	41720.	42299.	43347.	44319.	44702.	45795.	45495.	47932.	47828.	48501.	49003.	49179.
18. Private Telephone Connections (03)*	148905.	151860.	152883.	153874.	156290.	158740.	159456.	160688.	163100.	163790.	162953.	162126.
19. Total Telephone Connections (03)*	190625.	194159.	196230.	198193.	200992.	204535.	204951.	208620.	210928.	212291.	211956.	211305.

Natural gas usage, being highly seasonal in nature, reaches the abyss of its consumption cycle during the third quarter. Total consumption for 3/82 is down 24.13 percent from 2/82, resulting from 65.16 percent decrease in residential use, a 64.20 percent decrease in commercial use, a 66.82 percent decrease in "other" use, and is offset by a slight 4.30 percent increase in industrial consumption. Next quarter will inevitably see a significant jump in natural gas consumption; however, residential consumers may not increase their usage at the rate seen in recent years. Price increases in what had been America's "bargain-basement fuel", may find Wyoming families purchasing the popular energy conserving devices--wood-burning stoves and kerosene heaters--to cut their heating bills.

Total electrical consumption registered a negligible 1.20 percent decline in usage in 3/82 under 2/82. Other years have experienced increases during the same time period, associated primarily with increases in "other" consumption. Irrigation and other electrical uses contributed to increases of 3.92 and 1.31 percent during the third quarters of 1980 and 1981, respectively. "Other" consumption also increased during 3/82, but the more than 100 percent increase did not compensate for the ebbs in residential and industrial electric consumption.

Total telephone connections exhibits its first slump within the reported 12 quarter period. The decline is due to a .51 percent decrease in private telephone connections accompanied by a meager .36 percent increase in business telephone connections.

¹Some small utilities do not report, hence the data are slightly less than actual state totals. Data are consistent. The same utilities' reports are included in each figure.

²Other includes Agriculture, Municipal, and Other Public.

*Over a 4 year period, Mountain Bell reported figures for private telephone connections and business telephone connections contrarily. Figures for 3/79-3/81 have therefore been corrected since previous issues of the WQU.

Figure 8: Consumers

32

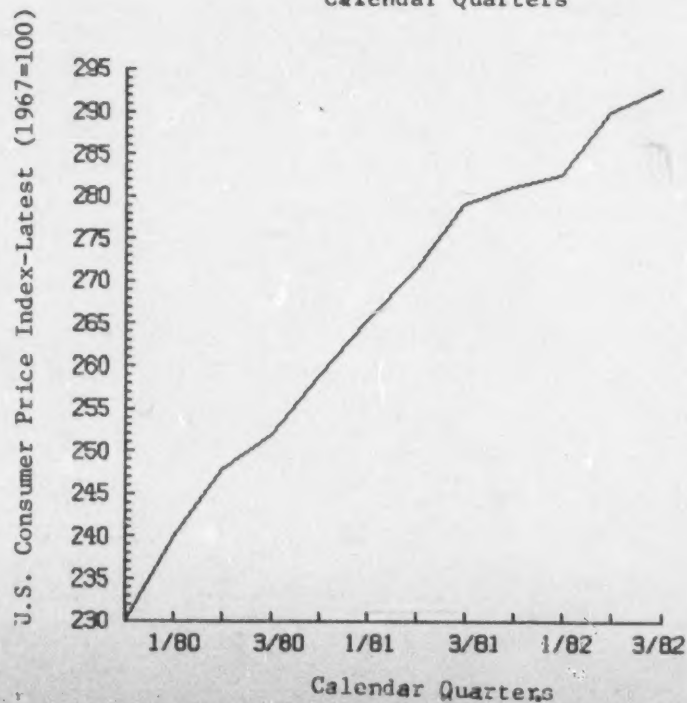
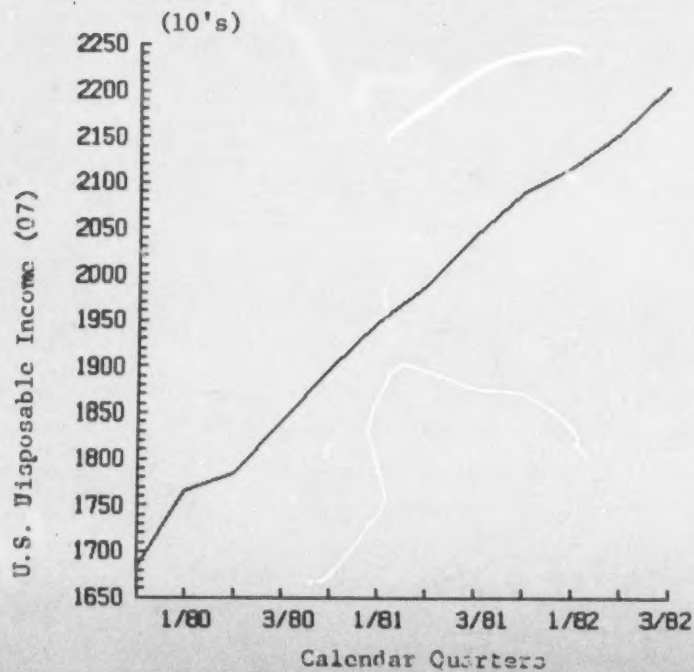
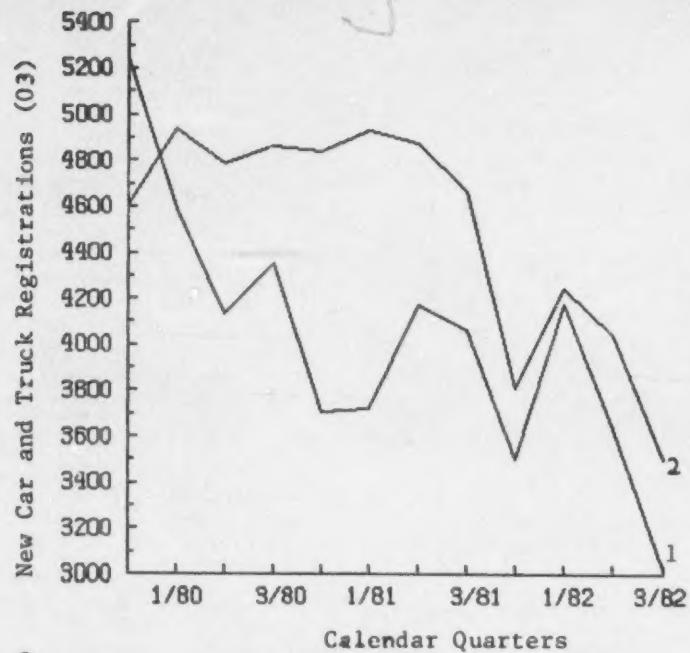
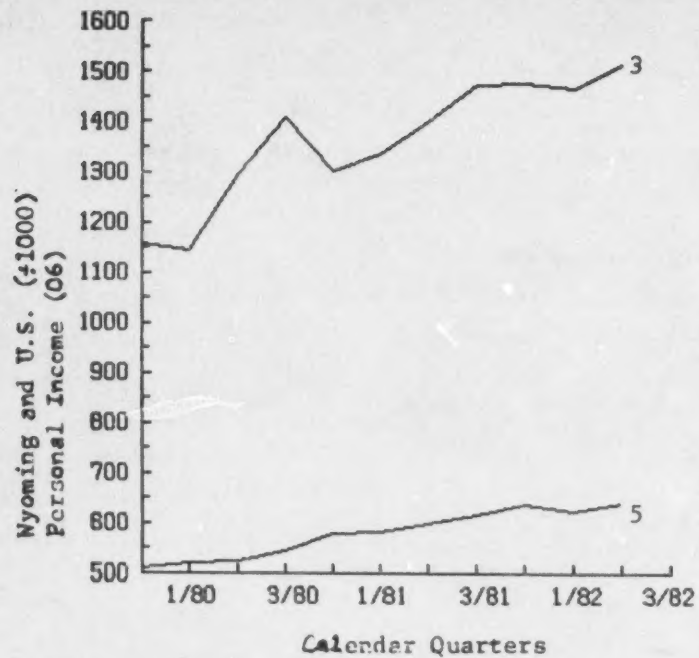


Table 8: Consumers

Calendar Quarters	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82
1. New Truck Registrations (03)	5248.	4593.	4134.	4353.	3706.	3723.	4175.	4067.	3502.	4176.	3636.	3024.
2. New Car Registrations (03)	4608. ²	4937.	4787.	4859.	4839.	4926.	4879.	4664.	3808.	4249.	4042.	3506.
3. Wyoming Personal Income (06)	1158. ²	1143.	1296.	1409.	1303.	1337.	1403.	1474.	1476.	1468.	1516.	INA ¹
4. U.S. Disposable Income (07)	1683. ²	1765.	1784.	1841.	1897.	1948.	1986.	2042.	2088.	2117.	2155.	2205 ¹
5. U.S. Personal Income (06)	510219. ²	521332.	524735.	543122.	579903.	581161.	601311.	615399.	637178.	625638.	641570.	
6. Latest U.S. Consumer Price Index (1967=100)	230.0	239.9	247.8	251.9	258.7	265.2	271.4	279.1	281.1	282.5	290.1	292.8
7. Quarter's Average U.S. CPI	227.7	236.6	245.2	249.8	256.4	263.1	269.1	276.7	280.4	281.9	286.8	292.3 ⁵
8. Wyoming Liquor Sales (08)	9586.	6410.	7696.	8951.	11280.	6845.	9397.	9396.	11365.	7789.	9057.	9342.

Real interest rates remain high, and as a result cars and trucks are not selling at anything like the rate experienced in previous third quarters. During 3/82, new car and truck registrations were 24.8 and 25.7 below 3/81 levels, and 37.7 and 44.4 percent off compared to 3/79, respectively. On a more positive note, the decline in car and truck sales during the past two years, along with continued growth of Wyoming's population and personal income, and the increasing average age of the vehicle fleet suggest a substantial leap in sales when recovery gets under way. The key is a decline in real consumer loan rates.

The estimate of 2/82 U.S. disposable income printed in the last WQU missed the actual value shown above by only 0.2 percent. The estimate for 3/82 indicates an increase of 2.3 percent over the previous quarter (+1.4 percent in real terms), and an 8.0 percent increase (3.1 percent in real terms) over 3/81. Personal income data for 3/82 are not yet available. The data for 2/82 indicate an increase in Wyoming's personal income of 3.3 percent compared to the preceding quarter 8.1 percent (2.5 percent in real terms) compared to 2/81. The same comparisons for 2/82 U.S. personal income indicate increases of 2.6 (-0.1% real) and 6.7 (-0.2% real) percent, respectively.

The inflation picture improved substantially, both in Wyoming and in the U.S. During 3/82 the CPI increased at an annual rate of 3.7 percent. Wyoming's Department of Administrative and Fiscal Control reported an increase of 2.04 percent in the overall cost of living from 3/81 to 3/82. Liquor sales during 3/82 were virtually unchanged from either 3/81 or 2/82. Thus, they fell slightly in real terms.

¹Preliminary. An estimate based on trend and first month of the quarter.

²Estimated. Nov. 1979 data are missing.

³Seasonally adjusted at annual rates.

⁴Number shown is for the last month of the quarter.

⁵Based on trend and first two months of the quarter.

Consumers

Wyoming Comparative Cost of Living Index* (October 6-8, 1982): Cheyenne = 100

City	Rank	All Items	Food	Housing	Transportation	Medical
Jackson	1	129.96	117.57	156.63	99.81	105.40
Gillette	2	121.30	126.32	134.54	103.42	107.37
Pinedale	3	113.78	112.01	125.16	99.16	99.07
Evanston	4	113.60	111.36	121.37	103.72	107.89
Kemmerer	5	112.94	113.92	121.44	101.38	102.19
Casper	6	112.23	115.63	115.63	106.43	110.17
Rock Springs	7	110.30	113.88	113.37	104.48	105.15
Riverton	8	109.88	117.87	113.27	104.24	101.78
Thermopolis	9	109.67	125.05	109.95	100.39	96.45
Sheridan	10	108.70	117.23	110.67	100.35	100.17
Sundance	11	107.99	120.11	109.35	97.38	102.62
Newcastle	12	107.51	120.65	107.50	96.44	106.66
Cody	13	106.02	120.00	106.23	99.42	102.67
Worland	14	105.98	117.60	106.00	98.73	102.13
Buffalo	15	105.96	121.83	102.56	97.73	103.93
Laramie	16	104.48	107.93	107.64	98.82	92.76
Wheatland	17	103.64	116.80	98.07	101.91	97.86
Rawlins	18	102.02	109.17	102.59	100.50	92.52
Douglas	19	101.57	108.36	96.22	101.18	106.75
Cheyenne	20	100.00	100.00	100.00	100.00	100.00
Greybull	21	99.05	115.73	90.40	98.69	97.72
Torrington	22	96.51	103.02	91.74	95.85	97.53
Lusk	23	91.74	111.55	76.58	97.00	94.95

Wyoming Comparative Cost of Living Index* (July 7-9, 1982): Cheyenne = 100

City	Rank	All Items	Food	Housing	Transportation	Medical
Jackson	1	123.82	105.50	149.06	99.70	105.41
Gillette	2	119.01	106.46	138.51	102.35	108.07
Kemmerer	3	116.19	103.28	133.67	102.07	95.92
Rock Springs	4	113.77	104.47	124.25	105.28	103.34
Casper	5	113.19	105.46	123.23	107.60	104.91
Pinedale	6	112.97	105.67	125.71	100.82	102.79
Evanston	7	111.73	100.22	121.66	101.75	108.11
Riverton	8	111.52	105.58	120.78	105.30	105.50
Sheridan	9	108.75	104.33	114.87	101.15	104.99
Rawlins	10	107.95	100.44	119.78	101.06	94.28
Douglas	11	107.55	102.06	111.67	101.50	113.61
Thermopolis	12	106.73	111.06	109.38	98.28	101.12
Sundance	13	106.32	96.80	116.02	98.18	103.42
Laramie	14	105.93	98.03	113.42	98.19	96.93
Wheatland	15	104.33	102.82	105.81	102.93	97.41
Cody	16	104.26	106.02	108.45	98.08	104.28
Buffalo	17	103.86	103.77	105.15	99.09	106.04
Newcastle	18	103.21	108.20	105.43	95.78	99.06
Cheyenne	19	100.00	100.00	100.00	100.00	100.00
Worland	20	99.89	102.10	98.49	98.66	105.38
Greybull	21	96.28	104.94	87.68	99.24	98.11
Lusk	22	95.30	101.49	86.93	97.85	101.62
Torrington	23	95.19	95.29	92.44	96.56	94.31

Source: Wyoming Department of Administrative and Fiscal Control
 *Apparel and Recreation indices not shown.

Economic Base Multipliers for Wyoming Counties

County	1980 ¹	1982 ²
Albany	1.70	1.71
Big Horn	1.56	1.56
Campbell	1.67	1.69
Carbon	1.65	1.67
Converse	1.58	1.60
Crook	1.45	1.45
Fremont	1.75	1.76
Goshen	1.56	1.56
Hot Springs	1.46	1.46
Johnson	1.48	1.48
Laramie	1.86	1.87
Lincoln	1.56	1.58
Natrona	1.87	1.89
Niobrara	1.38	1.38
Park	1.65	1.65
Platte	1.56	1.54
Sheridan	1.67	1.69
Sublette	1.43	1.43
Sweetwater	1.76	1.79
Teton	1.52	1.54
Uinta	1.57	1.66
Washakie	1.53	1.53
Weston	1.49	1.49

Economic base multipliers are useful in development planning and impact assessments. The preceding list was generated from the Minimum Requirements Method first proposed by Ullman and Dacey (1960) and later revised by Moore (1975). In that formulation, the local service employment is a simple function of population according to the following equation specified by Moore (1975).

$$\%Local = -20.36538 + 13.7834(\text{Log } 10 \text{ of Population})$$

Then the multiplier equals:

$$100\% \div \%Basic, \text{ where } \%Basic = 100 - \%Local.$$

The multipliers generated by this method have proven to be very close to multipliers generated by much more complicated, time-consuming methods. To learn more, the interested reader should consult the following references.

Dacey, Michael F., and Ullman, Edward L., 1960. The Minimum Requirements Approach to the Urban Economic Base. *Papers and Proceedings of the Regional Science Association*, 1960, 175-194.

Moore, Craig, 1975. A New Look at the Minimum Requirements Approach to Regional Economic Analysis. *Economic Geography*, Vol. 51, 351-356.

Pratt, Richard T., 1968. An Appraisal of the Minimum-Requirements Technique. *Economic Geography*, Vol. 44, 1968, 117-124.

Roepke Howard G. and Freudenberg, David A., 1981. The Employment Structures of Nonmetropolitan Counties. *Annals of the Association of American Geographers*, V. 71, No. 4, 580-592.

Ullman, Edward L., 1968. Minimum Requirements After a Decade: A Critique and an Appraisal. *Economic Geography*, Vol. 44, 1968, 364-369.

¹Population data based on 1980 Census

²Population data based on 1982 Department of Administrative and Fiscal Control estimates

Figure 9: Banking and Finance
(1000's)

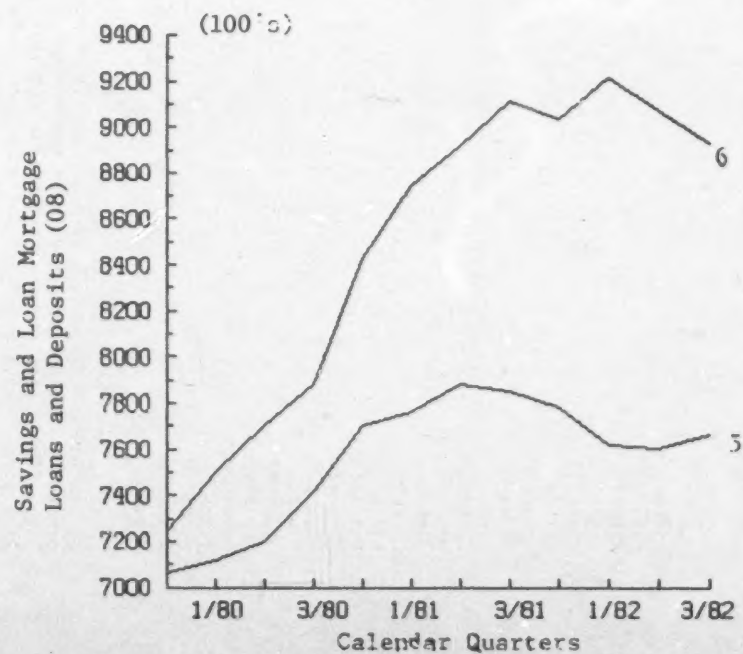
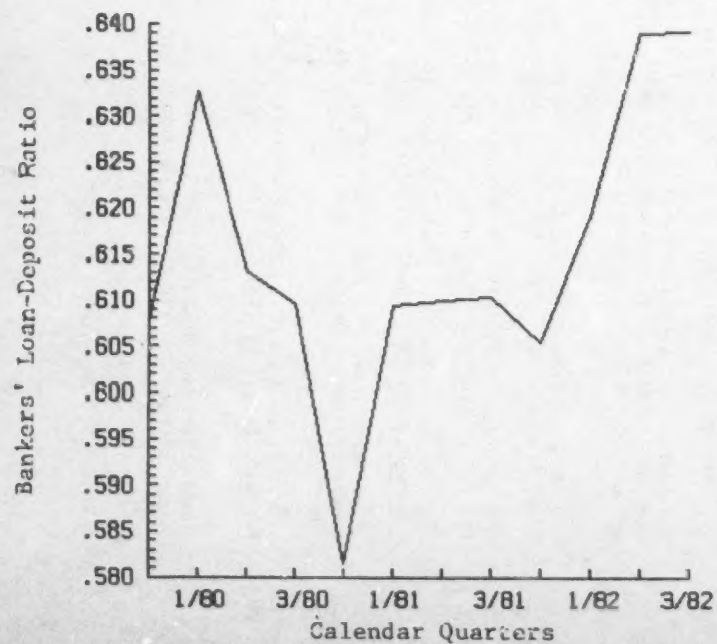
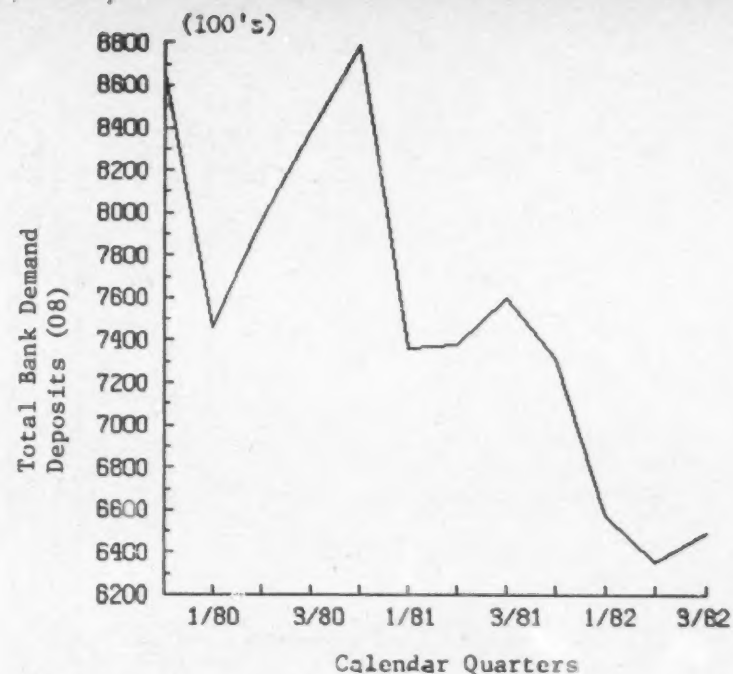
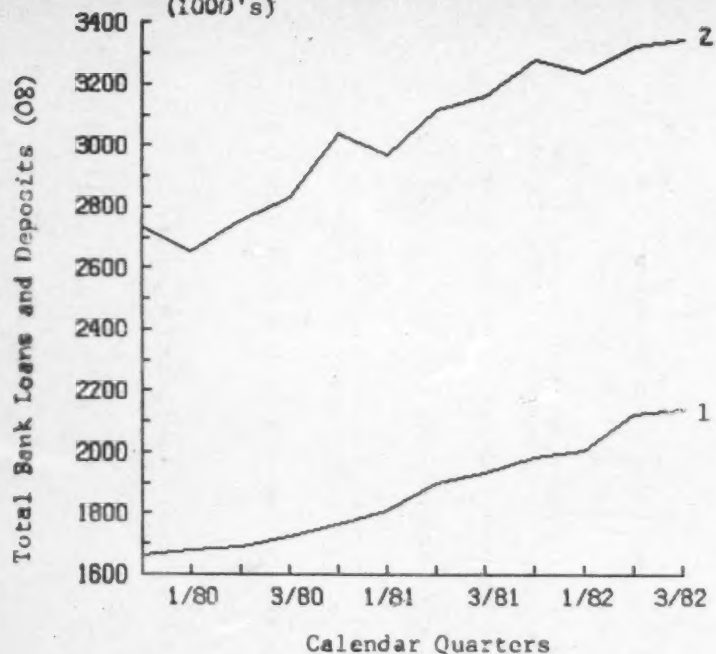


Table 9: Banking and Finance

Calendar Quarters	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82
1. Total Bank Loans (08)	1661606.	1677881.	1689496.	1722916.	1764381.	1808747.	1898325.	1929706.	1984965.	2004233.	2123492.	2138495.
2. Total Bank Deposits (08)	2734107.	2651863.	2755238.	2826427.	3034647.	2968348.	3112270.	3161593.	3278504.	3237333.	3322621.	3345619.
3. Total Bank Demand Deposits (08)	865452.	746467.	796838.	839111.	878444.	736161.	737837.	759658.	731429.	657349.	635856.	649332.
4. Banker's Loan-Deposit Ratio	.608	.633 ¹	.613	.610	.581	.609	.610	.610	.605	.619	.639	.639
5. Savings and Loan Mortgage Loans ¹ (08)	706103.	711387.	719627.	741479.	770474.	776172.	786526.	785208.	778334.	762153.	760622.	766593.
6. Savings and Loan Deposits (08)	724538.	749815.	770186.	788448.	842740.	874533.	891585.	911587.	904212.	921642.	907758.	893087.

Although the prime rate declined to 13.50 in the last weeks of 3/82, interest rates charged consumers for loans rose steadily. Despite this nationwide occurrence, Wyoming banks saw an increase of .71 percent in total bank loans. This increase in debt held was accompanied by a \$23 million expansion in total bank deposits, associated with a near \$14 million expansion in demand-type deposits.

Wyoming savings and loans, the primary source of home loans, showed a weakened condition in comparison to Wyoming banks' fortunes continuing the trend for 1982, savings and loan mortgage loans rose .79 percent over 2/82, while savings and loan deposits were down 1.62 since 2/82. Newly passed legislation may mean better times ahead for savings and loans. Having been chiefly limited to making home mortgage loans, savings and loans will be able to make commercial and agricultural loans, giving them another way to stay in business when houses aren't selling as well as a chance to compete with banks. The legislation will also allow savings and loans (and banks) to offer high-interest check accounts to their customers, thereby competing for deposits with money market mutual funds.

¹Only members of the Federal Home Loan Bank Board are included.

Figure 10 Government

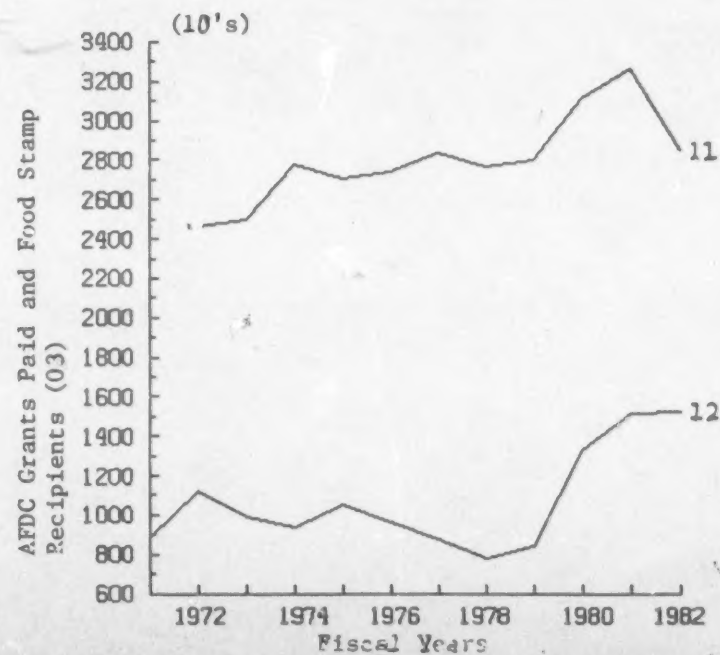
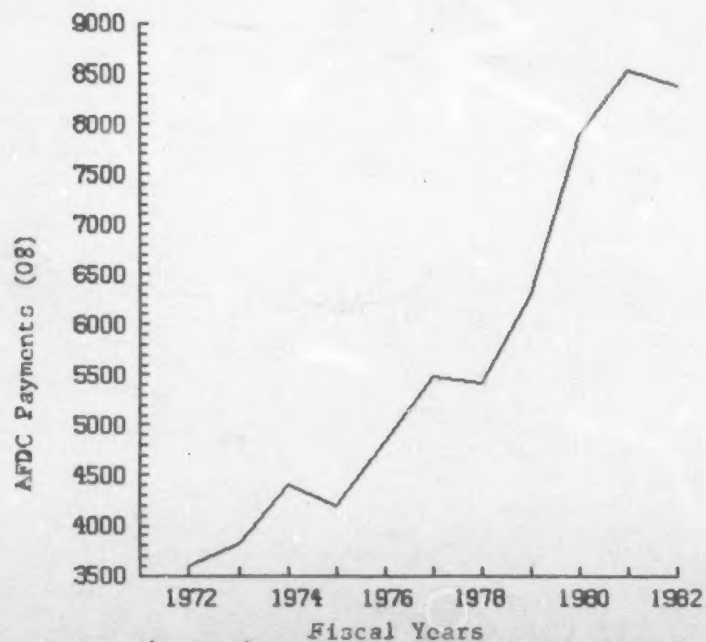
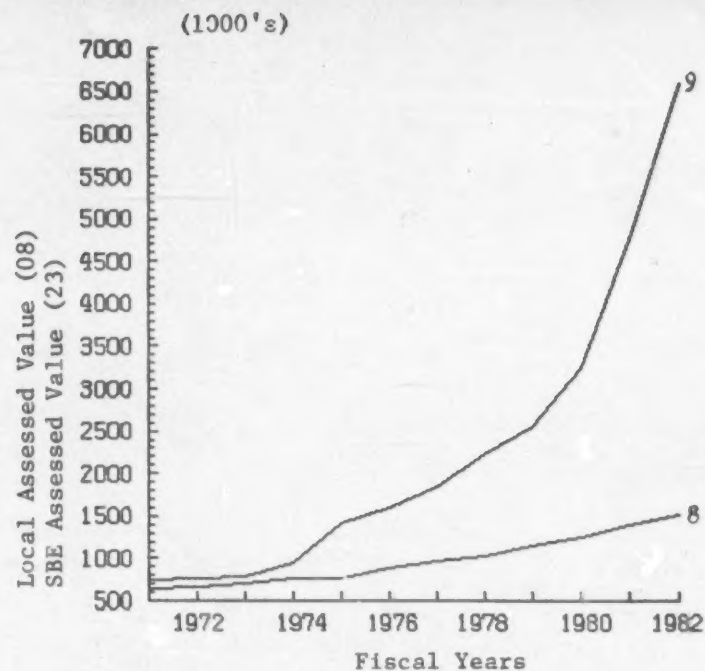
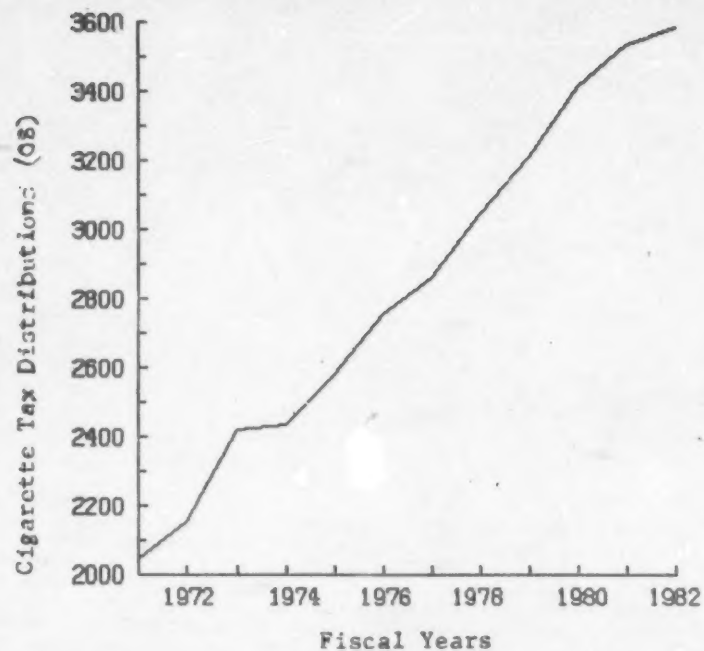


Table 10: Government

Calendar Quarters	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82
Criminal Justice Statistics												
1. Violent Crime ¹ (24)	410.	363.	421.	496.	439.	420.	468.	599.	553.	373.	389.	411.
2. Nonviolent Crime ² (24)	4803.	4331.	5464.	5710.	4916.	5430.	5783.	6111.	5299.	4811.	5778.	6346.
3. Stolen Property (08)	2421.	3837.	3374.	3945.	3696.	3601.	4471.	4421.	3021.	3541.	4562.	3982.
4. Stole Property Recovery Rate (02)	48.6	43.4	51.9	41.9	46.8	36.0	45.4	40.6	58.6	46.9	49.3	42.8
5. Percent of Crimes ³ Cleared (02)	23.0	23.0	19.1	19.0	23.4	21.6	23.4	19.5	22.3	24.9	21.0	20.0
Tax Revenues												
6. Sales and Use Tax Collections (08)	41630.	48511.	58928.	59626.	57547.	58605.	64136.	66012.	68766.	73830.	66759.	65903.
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
7. Cigarette Tax Dist. (08)	2047.	2155.	2418.	2436.	2581.	2755.	2859.	3044.	3212.	3414.	3535.	3586.
8. Locally Assessed Property Valuations (08)	636232.	661655.	697094.	756251.	758249.	885462.	970776.	1020443.	1156840.	1261391.	1397953.	1521416.
9. State Board of Equalization Valuations (23)	74820.	77430.	78900.	95270.	141020.	160390.	183340.	223130.	254580.	325370.	477830.	659070.
10. AFDC ⁴ Payments (08)	INA	3600.	3827.	4410.	4194.	4826.	5483.	5418.	6291.	7893.	8542.	8387.
11. AFDC ⁴ Grants (03)	INA	24603.	24965.	27744.	27039.	27459.	28358.	27719.	27999.	31177.	32719.	28605.
12. Food Stamp Recipients (03)	8886.	11205.	9940.	9402.	10484.	9610.	8795.	7762.	8445.	13286.	15133.	15272.

Statewide sales and use tax collections were down 1.28 percent during 3/82 over 2/82. This is an unseasonal down-turn considering that a traditional increase in economic activity, in particular via the tourism industry, during the third quarter usually sparks an increase in sales and use tax collections. Collections in 3/82 are, in addition, down .17 percent below 3/81, lower than the 2.04 percent inflation rate prevailing during the same period.

Meanwhile, the cigarette tax distributions apparently continue to increase, as they have for each of the last 10 years. These increases are evident only when inflation is not taken into account. For instance, 1982 data indicate an increase of 1.44 percent in distribution over 1981. In real terms, however, there is a 4.2 percent decrease (rate of increase minus inflation rate) in the amount of money distributed from the cigarette tax.

Locally assessed and State Board of Equalization (SBE) assessed valuations both continue to rise. The SBE valuation increased more rapidly than the locally assessed valuation. In 1982, SBE valuation increased 8.83 percent, significantly higher than the state's inflation rate of 5.64 percent during fiscal year 1982.

Over 8.3 million dollars were paid to 28,605 Aid for Families with Dependent Children recipients residing in Wyoming in 1982. These figures represent decreases of 1.81 percent in dollars spent and 12.57 percent in number of recipients over 1981. The average recipient received 12.26 percent (much more than inflation) more in 1982 than in 1981. The number of food stamp recipients increased .92 percent in 1982 over 1981. (Note: With the start of the new fiscal year, eligible food stamp recipients will receive a cost-of-living increase, the first in nearly two years).

The crime picture in Wyoming has brightened over the past year. With the exception of a 3.85 percent increase in nonviolent crime, perhaps attributable to the increase in unemployment, all other crime statistics show improvement during 3/82 over 3/81. Those data are particularly encouraging when one considers the fact that difficult economic times usually push up crime rates.

The following eight pages give sales and use tax and cigarette tax data, and SBE and locally assessed valuations data for each county for the years 1970 to 1982. For each, a 1980 and 1982 map indicates the spatial variability in the data. The differences between counties are substantial, and changed considerably even over a period as short as two years.

¹Murder, negligent homicide, forcible rape, robbery, aggravated assault.

²Burglary, larceny, auto theft.

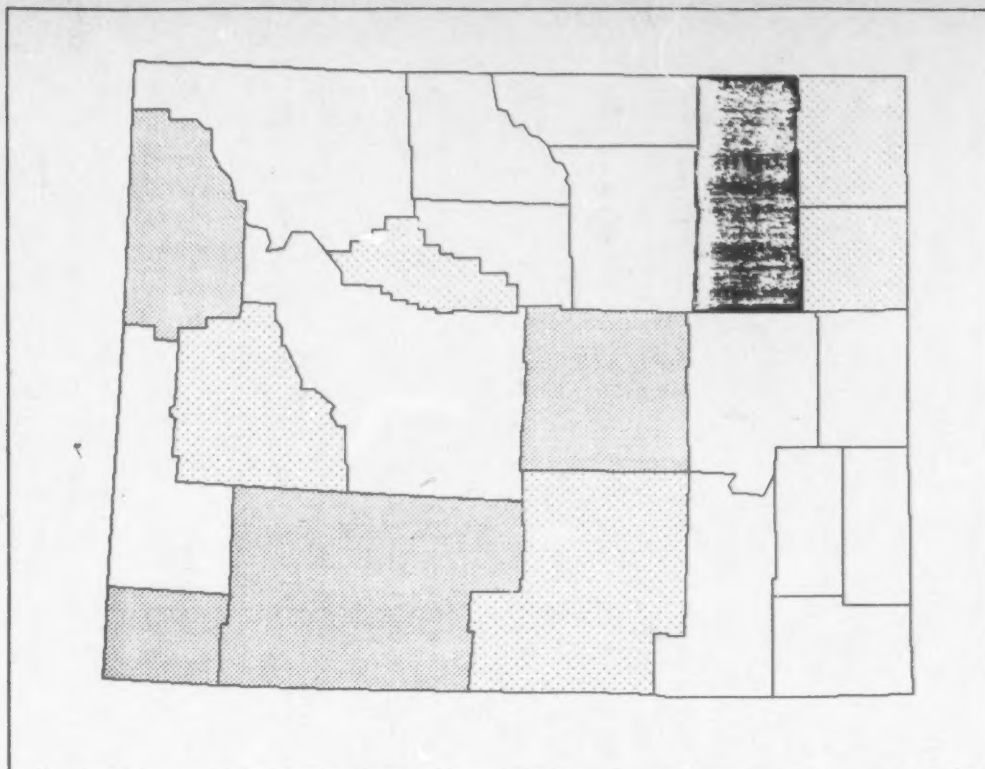
³Clearance of a crime indicates resolution of a complaint by arrest or other extraordinary means.

⁴AFDC: Aid to Families with Dependent Children.

Sales and Use Tax Collections by County

40

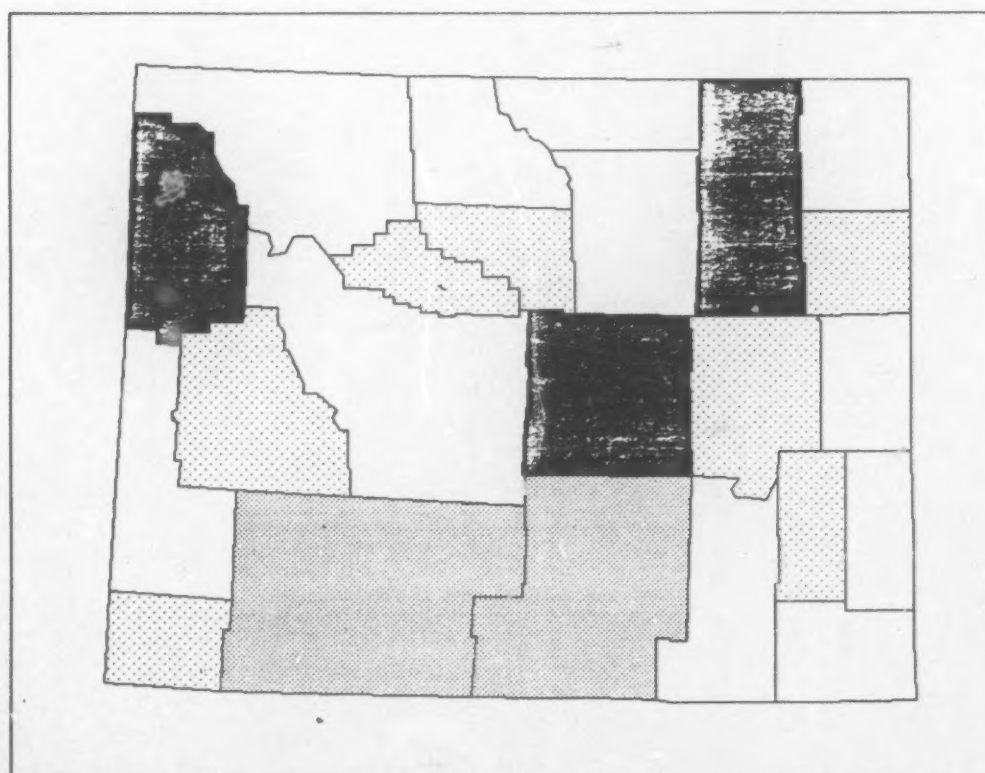
Fiscal Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Albany	1608491.	1735138.	1925823.	2058779.	2227478.	2427340.	3000783.	3382182.	4090480.	3174758.	4877631.	5585492.	5886679.
Big Horn	588536.	621321.	702977.	799071.	908712.	1088284.	1192320.	1289474.	1468654.	1260042.	1834375.	2110631.	2372989.
Campbell	2317798.	2083896.	1919239.	2200689.	2668182.	4739975.	5240779.	8224673.	11933643.	8576491.	14167548.	20513629.	25949524.
Carbon	1089448.	1308818.	1554528.	1856609.	2140551.	3299427.	3470590.	4533693.	6230708.	5531253.	8573894.	10099743.	9852586.
Converse	418237.	483925.	503740.	558965.	719473.	1008556.	1593737.	2323005.	2947155.	10537358.	4117827.	4913146.	5780495.
Crook	278888.	276293.	285619.	331505.	377431.	442347.	569334.	626689.	795358.	816409.	1172773.	1476321.	2181116.
Fremont	1917181.	2091853.	2290387.	2650013.	2948135.	3673263.	4562969.	5739204.	7332615.	6521495.	9615481.	11250954.	11739879.
Goshen	678689.	750495.	853178.	1000157.	1174064.	1363565.	1572721.	1581807.	1767552.	1644256.	2463066.	2353621.	2344473.
Hot Springs	375286.	406169.	478199.	519859.	581423.	753293.	849257.	1028561.	1300389.	1319043.	1837829.	2330544.	2509533.
Johnson	423696.	453565.	456723.	517683.	577770.	696710.	960033.	935051.	1121128.	1121259.	1643115.	1906343.	2283995.
Laramie	3693361.	4067707.	4691907.	5650345.	6167302.	6998607.	7976280.	8684210.	11599854.	10329659.	15473628.	17586838.	18678927.
Lincoln	510965.	568464.	621588.	673304.	768244.	956666.	1095679.	1532159.	1826740.	1624964.	2756329.	4127658.	4806112.
Natrona	6085273.	6458131.	7209274.	8273639.	10256149.	32087139.	19483113.	23119986.	30354331.	22382107.	40667061.	52115392.	59217892.
Niobrara	196426.	209637.	231368.	244818.	275711.	311667.	353102.	407415.	516739.	419072.	658287.	784348.	825221.
Park	1695607.	1710118.	1953768.	2274666.	2564564.	3257151.	3509807.	4101623.	4767986.	3654371.	5493072.	7905014.	8226134.
Platte	417808.	445593.	491456.	567185.	681032.	798246.	976364.	1401470.	3702927.	3621831.	3484445.	2816807.	2273240.
Sheridan	1336660.	1480109.	1677018.	1843799.	2055786.	2433851.	2972476.	3420491.	4390251.	3959335.	6113433.	7038540.	7143326.
Sublette	323855.	303788.	355378.	369100.	432879.	524536.	610191.	651476.	861722.	779079.	1261160.	1524367.	1909261.
Sweetwater	1691924.	1907745.	2456624.	4550818.	7503535.	9840669.	9834891.	11979899.	13325926.	9638867.	18231737.	27219448.	29059081.
Teton	1025390.	1173998.	1324002.	1537236.	1828389.	2517133.	2989719.	3485485.	4310694.	3545289.	4565005.	5896823.	6627874.
Uinta	659814.	567843.	566902.	638096.	732575.	945463.	1190183.	1786089.	2479222.	2102074.	4677506.	8800137.	15535851.
Washakie	746178.	791350.	887385.	991911.	1107965.	1330430.	1611228.	1778066.	2090939.	1585121.	2590879.	3509854.	3141839.
Weston	551194.	509228.	531000.	586616.	686041.	912505.	1371913.	1562211.	1787897.	1494958.	2084683.	28445505.	3340066.
Wyoming	31494707.	34363062.	37687448.	44929272.	55265770.	76200841.	88399589.	106813174.	137906932.	165107953.	196884131.	239913704.	275366889.



KEY: \$/PERSON

	962.22
	769.44
	576.66
	383.87
	191.09

Map 1: 1982 SALES AND USE TAX COLLECTIONS PER CAPITA



KEY: \$/PERSON

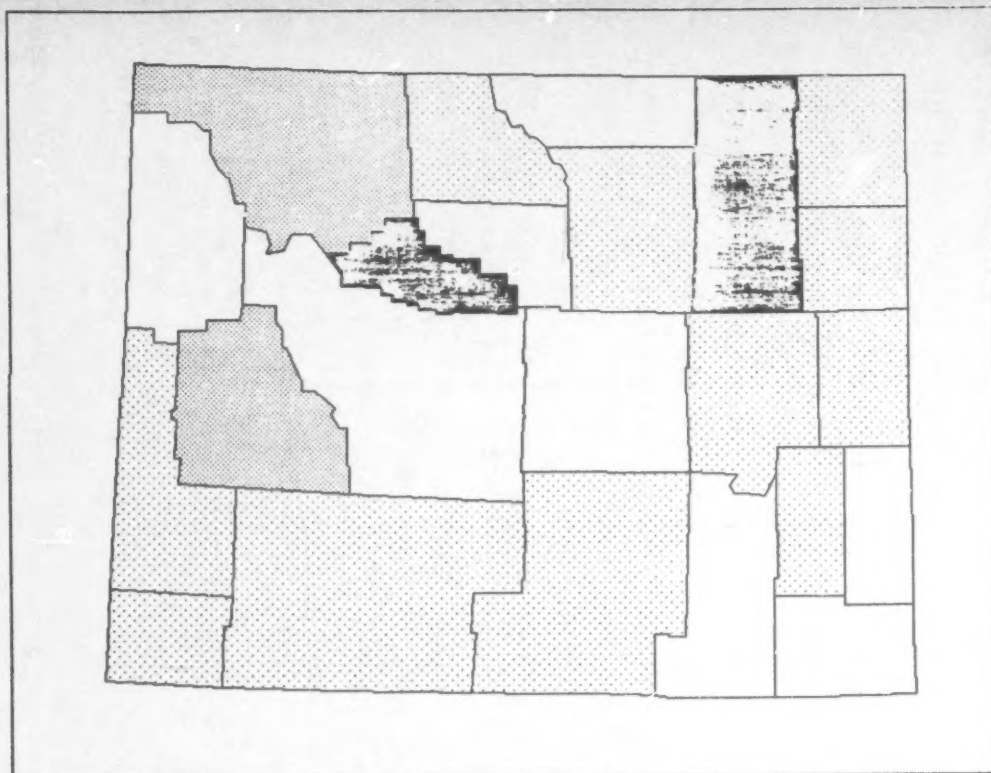
	585.69
	477.82
	369.95
	262.07
	154.20

Map 2: 1980 SALES AND USE TAX COLLECTIONS PER CAPITA

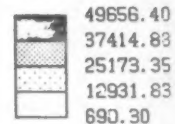
State Board of Equalization Property Valuations by County

42

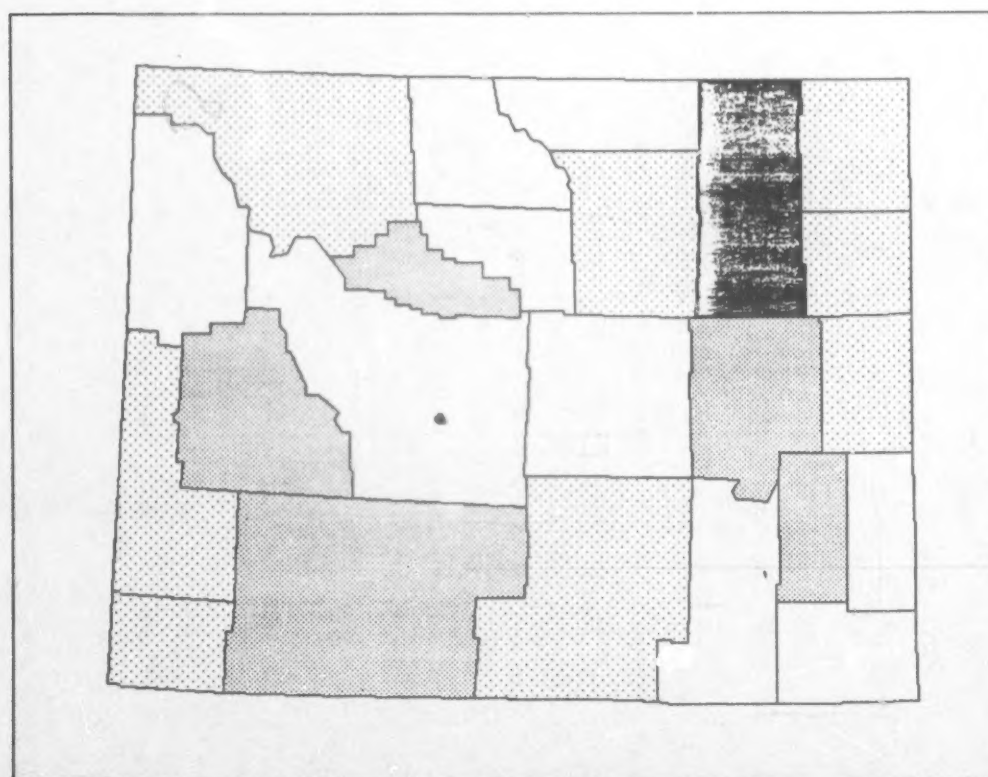
Fiscal Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Albany	15523434.	16668340.	18205962.	19188766.	19627204.	20163520.	20595519.	20913219.	21065374.	22663460.	26364084.	29227975.	33381680.
Big Horn	21596285.	21375876.	22266798.	23218320.	25259306.	39928127.	58331403.	56773420.	57009938.	62300048.	74039456.	112993054.	182925349.
Campbell	100698296.	126612122.	121557030.	117621369.	158420299.	285913179.	259638511.	296846115.	413452321.	494361467.	587257381.	861956780.	1260698156.
Carbon	26745740.	32447127.	37157756.	46495625.	56762452.	72011461.	115895318.	136583122.	175107480.	229522906.	268110892.	359005431.	533758387.
Converse	36464078.	43814092.	49334725.	51089558.	61478884.	105661126.	163386167.	149646905.	172581192.	186066391.	217489067.	318007957.	344708207.
Crook	14793529.	14866041.	14199876.	13509831.	17429783.	26989627.	27801039.	32115570.	30469373.	30799412.	41377264.	69399475.	97942471.
Fremont	56943088.	62371906.	61791381.	67446144.	67341091.	80440912.	84287532.	109882384.	151856368.	148325685.	195901476.	251832946.	390503729.
Goshen	5737923.	5184076.	5213664.	5371176.	5424327.	5621714.	5656536.	5886900.	5806083.	5901272.	9078390.	9103428.	9639228.
Hot Springs	32922256.	31081212.	30919679.	29101717.	34238819.	57588779.	61547376.	73572201.	80432236.	87997307.	94435551.	213152039.	285883643.
Johnson	16960968.	16539371.	16659554.	15126855.	16026220.	23388740.	29736784.	33236794.	33681626.	37349778.	47574675.	76252731.	98531331.
Laramie	20547725.	21068459.	22312768.	23822898.	25286022.	27866478.	30239528.	32149570.	37526087.	38778821.	46235114.	54394903.	62165614.
Lincoln	28878734.	35106172.	39031440.	42792971.	51765248.	62110167.	66038862.	88508219.	100290874.	110354592.	126265314.	167448517.	211121949.
Natrona	64172460.	60934801.	63803824.	63210135.	90907611.	123553512.	95632985.	87905794.	86614212.	96033234.	117170659.	164910287.	298357257.
Niobrara	4372124.	3850241.	3907328.	4150428.	4351776.	6366696.	8234129.	8812563.	9346507.	11573231.	27145414.	43225832.	50929939.
Park	96022231.	90711244.	94531997.	88462100.	97606851.	150563075.	176144387.	179800396.	178852377.	193212612.	231536077.	459112244.	692135300.
Platte	9010077.	8813054.	9177235.	9597220.	9365929.	11188524.	12029216.	17580845.	47514112.	75548936.	153985369.	150679583.	157464443.
Sheridan	7131492.	10279919.	11292584.	8803947.	7735023.	11379376.	13205169.	14295522.	38908675.	49754416.	67454097.	81082483.	72531610.
Sublette	24802904.	24770018.	25641149.	24635682.	30319903.	39720631.	46346597.	47019930.	63034060.	62604848.	77502997.	100355576.	129801981.
Sweetwater	75633575.	81930433.	86118913.	93507102.	127902321.	201224504.	266028106.	373847509.	449571908.	498380422.	650321049.	907243515.	1111193603.
Teton	1437319.	1776961.	2108081.	2065539.	2250526.	3064263.	3467819.	3685332.	4221156.	4813289.	5344029.	6428787.	7208112.
Uinta	11358225.	11684653.	12105493.	12277946.	13080230.	13529262.	14130579.	14521113.	20930270.	38109194.	107306209.	205658318.	376997046.
Washakie	11120403.	10783794.	10282454.	10989666.	11876361.	15575700.	15906362.	17776756.	20102756.	23112119.	26613114.	61187869.	82878559.
Weston	14325130.	15552117.	16690931.	16507332.	18238393.	26357768.	29640103.	32080509.	32959872.	38223144.	55235246.	75678474.	99966905.
Wyoming	697197996.	748222129.	774300713.	788992418.	952694579.	1410207141.	1603920027.	1833440688.	2231334837.	2545786584.	3253742924.	4778338204.	6590724499.



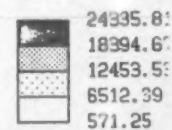
KEY: \$/PERSON



Map 3: 1982 SBE ASSESSED VALUATION PER CAPITA



KEY: \$/PERSON

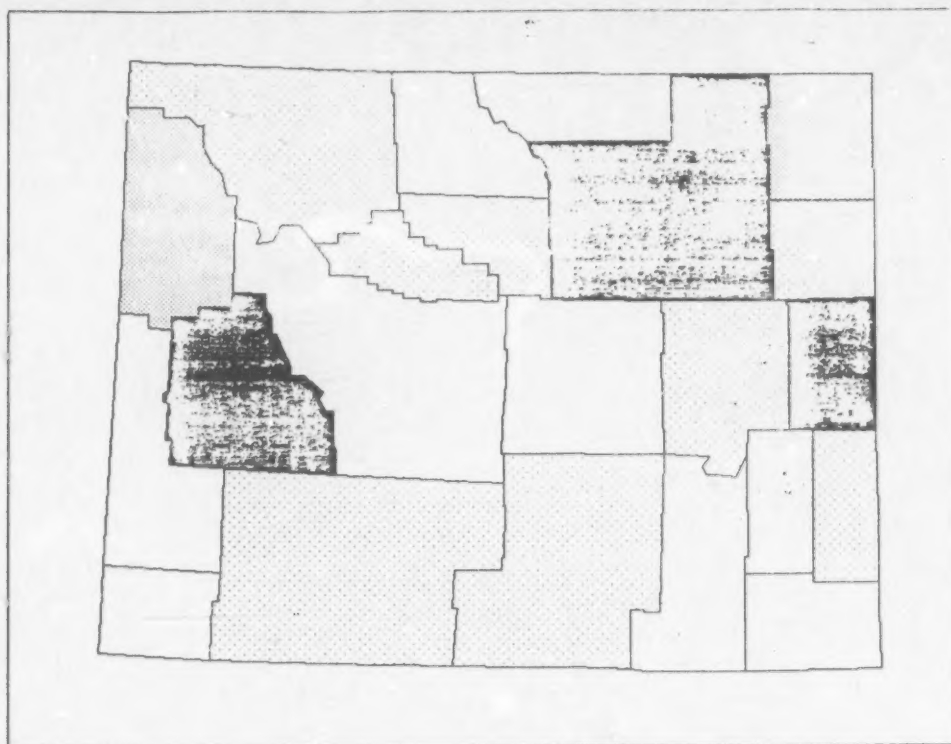


Map 4: 1980 SBE ASSESSED VALUATION PER CAPITA

Locally Assessed Valuation by County

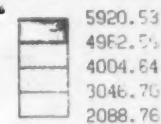
44

Fiscal Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Albany	33047558.	33543251.	35864591.	36820486.	38795845.	36343346.	44113039.	46909255.	49753451.	54595960.	56642475.	60099472.	63519068.
Big Horn	18099737.	18132429.	18038131.	18529141.	19964120.	18869665.	21221753.	22355875.	22121398.	23747938.	24986354.	27272012.	32319422.
Campbell	24623651.	27627552.	29196171.	31087581.	34585438.	36436176.	45101209.	59759177.	80808838.	101812427.	112471782.	136715187.	159912309.
Carbon	31724204.	33319109.	37826299.	39470638.	41898200.	41851844.	48650653.	52047682.	55752777.	64018028.	71263655.	80578920.	80481220.
Converse	16291119.	16834206.	19176312.	21147003.	23425795.	22739421.	28116080.	30877511.	37135443.	41586053.	46784472.	51723401.	53964075.
Crook	13178793.	13376483.	14313178.	15991389.	17588744.	15815846.	18599035.	18974489.	16556114.	18919265.	20239818.	21220439.	22098803.
Fremont	51157769.	52108599.	53431861.	54692825.	57769252.	56412839.	60998982.	65432438.	68312801.	81778341.	91247203.	98027349.	101247388.
Goshen	24502869.	24711990.	25706134.	27149659.	29335296.	27628907.	32090254.	33399185.	31550613.	34523792.	36148399.	37706935.	40210228.
Hot Springs	10228610.	10203580.	10473522.	10823632.	11633023.	10900274.	12586095.	13001142.	12310972.	13112809.	14624882.	17374404.	18036951.
Johnson	16642595.	16844720.	17531450.	18790507.	20371665.	19568455.	25017032.	25766655.	23110630.	28566484.	30643666.	34437227.	35988825.
Laramie	84879170.	85913812.	88088329.	92068281.	97598224.	103576951.	117189460.	123563202.	128172685.	139948349.	149024243.	151552952.	163552636.
Lincoln	15653474.	15955340.	16585540.	17714659.	20046669.	20272312.	24550006.	27548409.	26550242.	28314285.	30037422.	33028978.	36781028.
Natrona	81094089.	84398449.	84892416.	84245770.	88940647.	89894072.	112092178.	124879576.	131807211.	150223052.	163970817.	179214058.	193305500.
Niobrara	11364137.	11566741.	12303999.	13638942.	14969058.	13052880.	14316920.	14753381.	13310974.	13906413.	14442289.	15696783.	16421161.
Park	33112861.	33622044.	34508505.	35819171.	38572937.	38060012.	43979918.	46800063.	48549156.	52805239.	59142566.	64717421.	68110455.
Platte	14230835.	14289913.	15267925.	16390923.	18089454.	16949514.	19325484.	21096588.	19875079.	22220046.	23385838.	24784679.	25229928.
Sheridan	31371656.	31888663.	33137711.	35331972.	37903184.	35629990.	41052524.	43433051.	45822267.	54365729.	57297381.	61510936.	62626497.
Sublette	12906781.	13302666.	13524509.	14405718.	16060557.	14219283.	15876243.	17114264.	15265429.	17547823.	18923914.	22785553.	25943553.
Sweetwater	38081612.	39237247.	40075230.	47486939.	58223164.	71461924.	86336196.	96128068.	103467495.	115075791.	126068209.	147670785.	166591282.
Teton	16170614.	16918251.	18409568.	20479095.	22396801.	22795218.	25594776.	31664467.	33081478.	35086191.	42515673.	45402212.	47855020.
Uinta	12086624.	12216173.	12695466.	13188508.	14396993.	13860273.	15028640.	17049325.	17677047.	19940248.	24950580.	33962654.	52311478.
Washakie	14948968.	1499781.	15218094.	15661823.	16509574.	16142235.	17927882.	19945860.	22099279.	25674523.	26888157.	29834003.	31306158.
Weston	15280341.	15228812.	15390007.	16159473.	17176527.	15767795.	17498096.	18276587.	17332045.	19071160.	19691080.	22636213.	23603362.
Wyoming	620678067.	636231811.	661654948.	697094135.	756251167.	758249232.	885462455.	970776250.	1020443424.	1156839946.	1261390875.	1397952573.	1521416347.

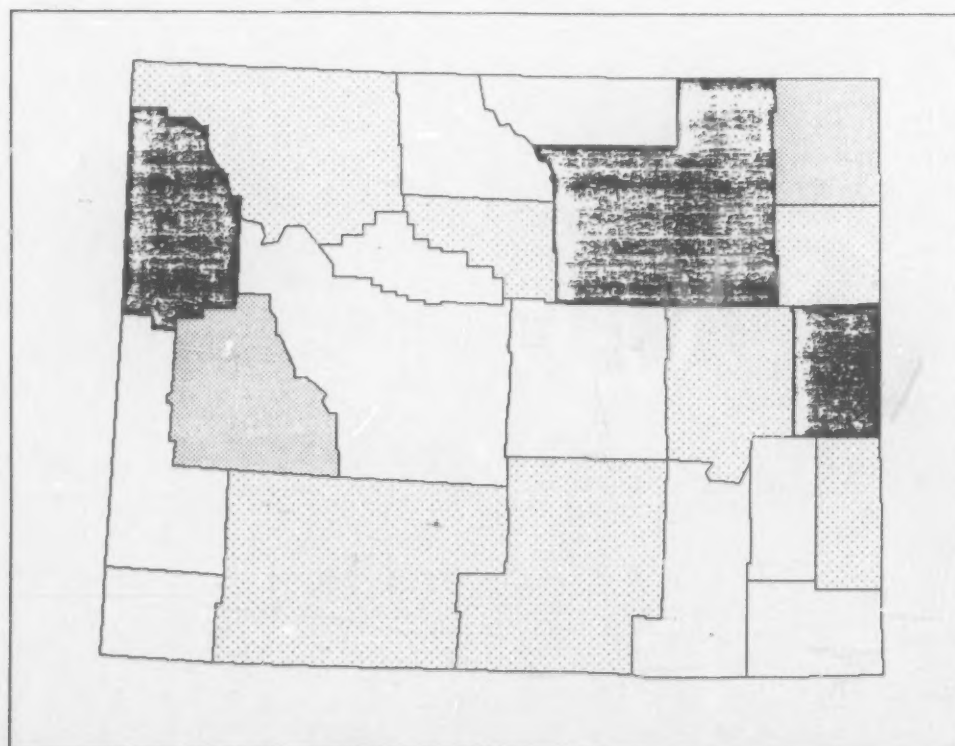


45

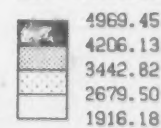
KEY: \$/PERSON



Map 5: 1982 LOCALLY ASSESSED VALUATION PER CAPITA



KEY: \$/PERSON

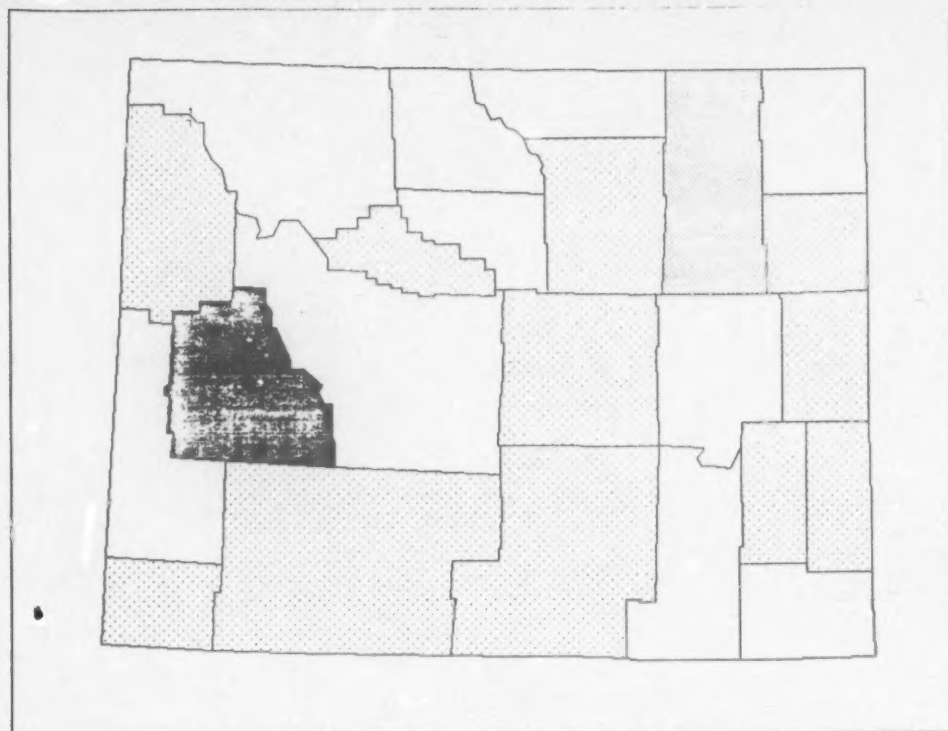


Map 6: 1980 LOCALLY ASSESSED VALUATION PER CAPITA

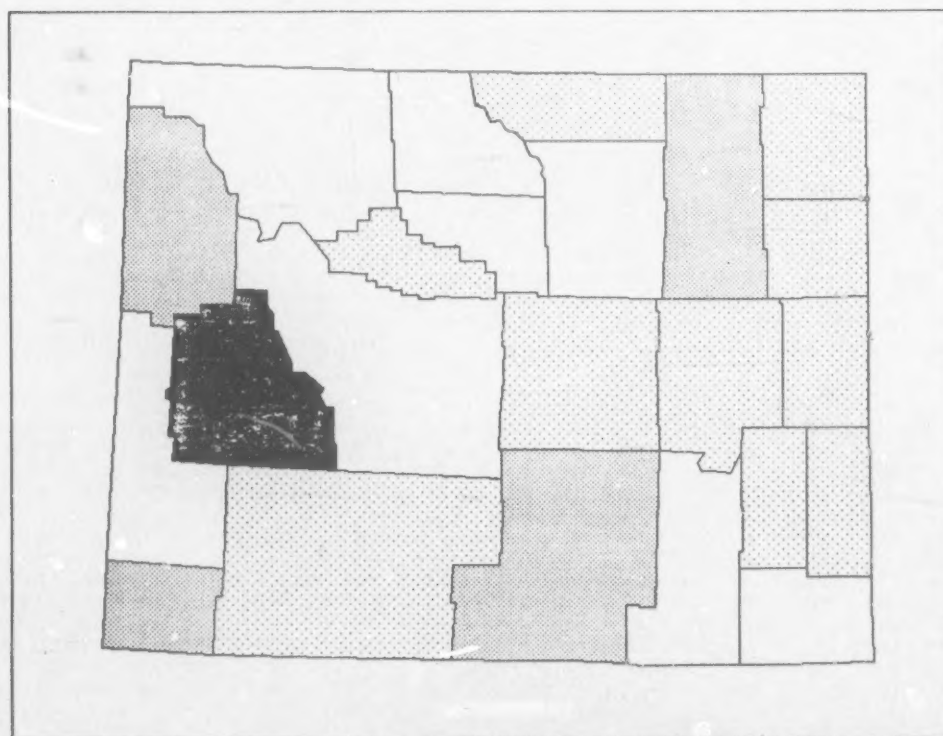
Distribution of Cigarette Tax to Cities, Towns, and Counties*

Fiscal Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Albany	127861.	129320.	136095.	143685.	134517.	137216.	145606.	152344.	145700.	142818.	152145.	146686.	147202.
Big Horn	43447.	46478.	46768.	52056.	59903.	52474.	56592.	56802.	56157.	58272.	59770.	61513.	64038.
Campbell	95612.	92086.	83974.	100800.	96064.	118254.	137295.	163073.	187870.	191419.	213895.	245719.	282397.
Carbon	87616.	97390.	108183.	110086.	135006.	130451.	137276.	153035.	166314.	175519.	195530.	198443.	180603.
Converse	30704.	39354.	37389.	42204.	45601.	59179.	71590.	76636.	86240.	95179.	101585.	103190.	104758.
Crook	24033.	24619.	24347.	26733.	25758.	30242.	34260.	36633.	35221.	34092.	35553.	36493.	36623.
Fremont	152572.	165738.	172767.	191756.	185217.	200420.	181418.	214245.	234670.	254287.	253878.	256637.	243048.
Goshen	58396.	61926.	68586.	79133.	73807.	82275.	86134.	84787.	85518.	84136.	86018.	85443.	84371.
Hot Springs	30024.	32670.	31630.	34415.	33587.	33864.	37747.	36195.	35932.	39469.	39313.	40211.	41028.
Johnson	35036.	34753.	32188.	34643.	34275.	35320.	42430.	40658.	43515.	44177.	42787.	45488.	46610.
Laramie	274680.	282948.	301174.	361286.	357095.	371453.	389974.	389479.	409815.	419705.	444986.	444119.	427899.
Lincoln	34455.	39718.	38941.	45025.	51691.	41880.	47584.	49221.	50572.	59067.	68234.	72163.	79577.
Natrona	377051.	396222.	411089.	454318.	424048.	437110.	475119.	490442.	527855.	557211.	596425.	614225.	620961.
Niobrara	16790.	17223.	18794.	20807.	19317.	19641.	22129.	21985.	21196.	21725.	22147.	24179.	22674.
Park	105030.	105760.	113933.	127026.	123300.	124686.	138951.	137246.	139156.	145221.	136129.	140370.	149333.
Platte	38981.	41366.	42777.	49525.	49102.	52547.	58659.	55507.	65326.	84546.	95659.	85188.	70871.
Sheridan	112230.	118510.	127366.	135244.	136831.	142128.	158483.	177003.	182140.	182915.	186731.	183383.	182208.
Sublette	21632.	22534.	23565.	20598.	22356.	26374.	25824.	21797.	31132.	37474.	52847.	49200.	58489.
Sweetwater	110965.	122856.	145077.	181439.	235827.	263158.	263317.	255372.	282362.	304149.	327056.	361615.	369963.
Teton	49061.	50517.	56083.	62857.	60369.	63490.	66698.	76295.	73245.	79055.	80844.	84661.	90350.
Uinta	31979.	35140.	42354.	47258.	47348.	65414.	54803.	60050.	74978.	86067.	112158.	139917.	160007.
Washakie	48458.	49526.	48616.	51056.	48904.	48712.	56081.	56595.	57158.	59945.	59778.	61630.	64638.
Weston	43041.	40794.	42975.	46121.	43924.	45183.	45610.	53915.	52088.	55308.	50949.	53081.	58256.
Wyoming	1949653.	2047395.	2154561.	2418061.	2436332.	2581473.	2754790.	2859314.	3044161.	3212056.	3414415.	3535364.	3585677.

*Totals subject to rounding error.



Map 7: 1982 CIGARETTE TAX DISTRIBUTIONS PER CAPITA



Map 8: 1980 CIGARETTE TAX DISTRIBUTIONS PER CAPITA

Converse County Profile

by John Merrifield and Ruth Tebbutt

PHYSICAL CHARACTERISTICS AND CLIMATE

Converse County is in east central Wyoming (Map 9) with more adjoining counties (eight) than any other in Wyoming. Its two largest towns are Douglas, the county seat, with 6030 people in 1980, and Glenrock with 2736 people in 1980. The population of the entire county was 14,069 in 1980.

In many ways Converse County is typical of Wyoming. Its land area of 4235 square miles is close to the average for Wyoming counties of 4281 square miles. The topography varies between gently rolling plains in the northern two-thirds of the county to the jagged granite peaks and pine forests of the Medicine Bow National Forest in the south. Glenrock and Douglas, both located along the North Platte River, have elevations of roughly 5000'. The county's lowest elevation, roughly 4350', occurs northeast of Dull Center, where the Dry Fork of the Cheyenne River enters Weston County. The highest elevation, roughly 10,000', occurs on the slopes of Laramie Peak in the extreme southern part of the county. The most important topographical feature in the county is the North Platte River. Two railroads, Interstate 25, US 26-20, and most county residents are located on or near the banks of the North Platte.

The climate is relatively arid, especially in Glenrock and Douglas where weather data recording stations are located. In 1981, 11.34 inches of precipitation were recorded in Glenrock, and Douglas soaked up 9.42 inches. 1981 was a slightly drier year than usual. The annual range of average temperatures in Douglas is about 40°F, with an average of about 30°F in January and about 70°F in July. Average temperatures are slightly higher in Glenrock. The growing season data for Converse County is observed five miles southeast of Glenrock, and averages five months.

HISTORY

Nomadic Indian tribes, including the Arapaho, Crow, Shoshone, and Sioux, used Converse County as a hunting ground for centuries before the first white men arrived there. Just when the first white men saw parts of what is now Converse County is not known with certainty. Perhaps it was in 1743, when Louis Verendrye and a search party were known to be tracing Mississippi River tributaries westward in the hope that one would prove to be a navigable passage to the Pacific Ocean, known then just as the western sea. Although the time of the first such occurrence is uncertain, adventurers following the North Platte River were the first to pass through Converse County. Certainly, the first party to do so came no later than 1745. From then on the North Platte River Valley was nothing less than a natural freeway for countless fur trappers, traders, westbound settlers, and gold prospectors. The valley afforded relatively easy passage, plenty of water, abundant game, and good camping sites. John Fremont and Kit Carson followed the North Platte enroute to South Pass. The place where nearly every passer-through stopped to camp was called "The Rock in the Glen". Its name later became Glenrock, after, for a time, being referred to as Deer Creek. In 1847 Deer Creek became more than just a campground. Bridges were built

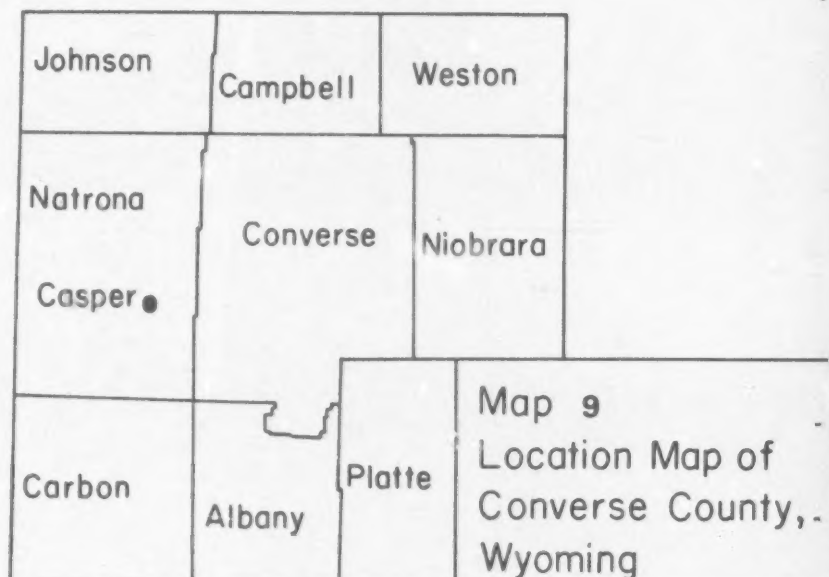


Table 11: Converse County Profile

Calendar Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1. Births (03)	112.	109.	78.	132.	195.	177.	239.	272.	320.	346.	345.	INA
2. Deaths (03)	78.	64.	71.	64.	88.	86.	82.	83.	91.	95.	76.	INA
3. Divorces (03)	26.	29.	35.	55.	66.	62.	72.	81.	88.	113.	98.	INA
4. Marriages (03)	95.	102.	120.	144.	144.	154.	166.	179.	223.	233.	204.	INA
5. Taxable Oil Production (26)	INA	29032.	37337.	60910.	90932.	75171.	77122.	76092.	70024.	70955.	65887.	INA
6. Taxable Oil Valuation (10)	INA	98899.	169784.	563097.	1068606.	859766.	871764.	946156.	1133361.	2002998.	2340607.	INA
7. Taxable Gas Production (27)	INA	8645.	19122.	39791.	117231.	146475.	149318.	155564.	137916.	139956.	121895.	INA
8. Taxable Gas Valuation (10)	INA	1102.	3354.	11832.	69969.	117200.	212189.	252900.	275499.	331582.	316337.	INA
9. Taxable Coal Production (33)	INA	22247.	24677.	24213.	30183.	25943.	30914.	29774.	30049.	31526.	32190.	INA
10. Taxable Coal Valuation (10)	INA	22712.	25174.	37064.	69440.	88205.	105107.	104209.	130711.	141869.	186702.	INA
11. Population* (03)	6600.	6700.	6900.	7200.	8000.	9400.	10600.	12300.	13900.	14069.	15272. ¹	15790. ¹
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
12. AFDC Recipients (03)	INA	367.	298.	335.	378.	430.	447.	579.	674.	796.	853.	627.
13. Food Stamp Recipients (03)	151.	209.	230.	204.	226.	204.	180.	181.	202.	247.	286.	272.
14. AFDC Payments (05)	INA	59362.	49418.	56605.	60076.	82109.	84362.	111408.	149414.	194951.	210154.	181765.
Calendar Quarters	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82
15. Lodgings' Sales and Use Tax Collections (05)	10565.	15443.	20944.	25987.	16794.	19094.	40908.	44718.	38950.	30373.	38469.	46159.
16. Total Sales and Use Tax Collections (05)	986357.	1094388.	1361295.	1234304.	1130622.	1143292.	1404928.	1484324.	1398578.	1379647.	1517946.	1311085.
17. Liquor Sales (05)	206524.	154426.	169279.	185192.	237464.	172912.	181226.	194279.	246808.	171234.	183444.	126748.
18. Gasoline Sales (22)	3262543.	2366619.	2783560.	2851144.	2572955.	2264623.	2600788.	2840718.	2546387.	2073992.	2311760.	25000000.
19. Civilian Labor Force (03)	7149.	6994.	7578.	8528.	8706.	7876.	8288.	8124.	7891.	7725.	8392.	7736.
20. Employment (03)	6956.	6800.	7387.	8255.	9384.	7545.	8040.	7905.	7625.	7425.	7993.	7346.
21. Unemployment (03)	193.	194.	191.	273.	322.	331.	248.	219.	266.	300.	399.	390.
22. Unemployment Rate	2.7	2.8	2.5	3.2	3.7	4.2	3.0	2.7	3.4	3.9	4.8	5.0

¹ DAFC estimate.

Figure 11a. Converse County On-Line Data Base

50

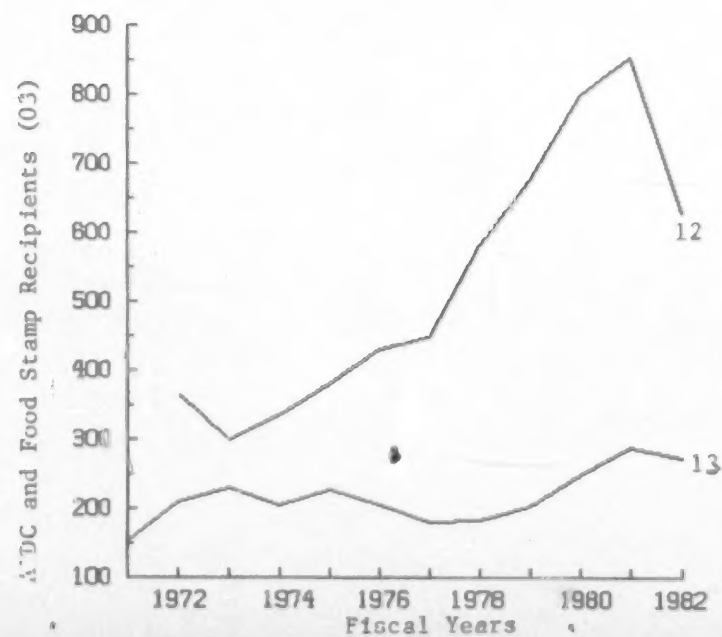
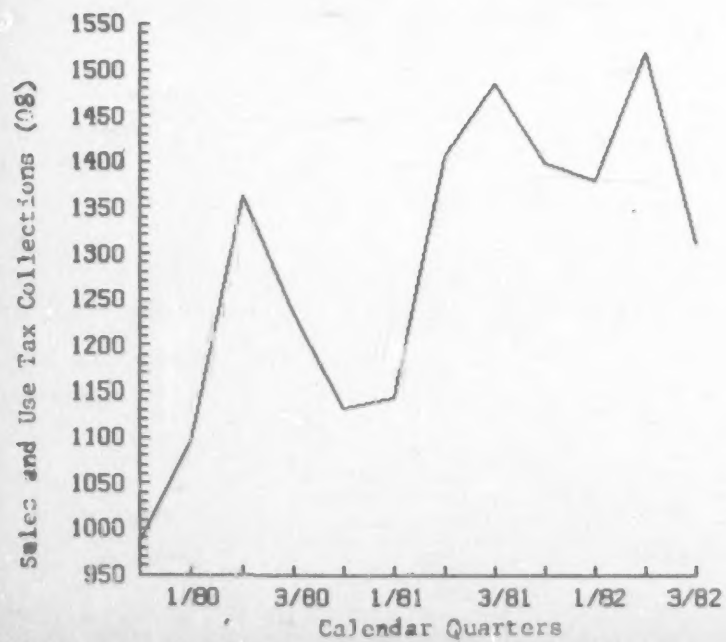
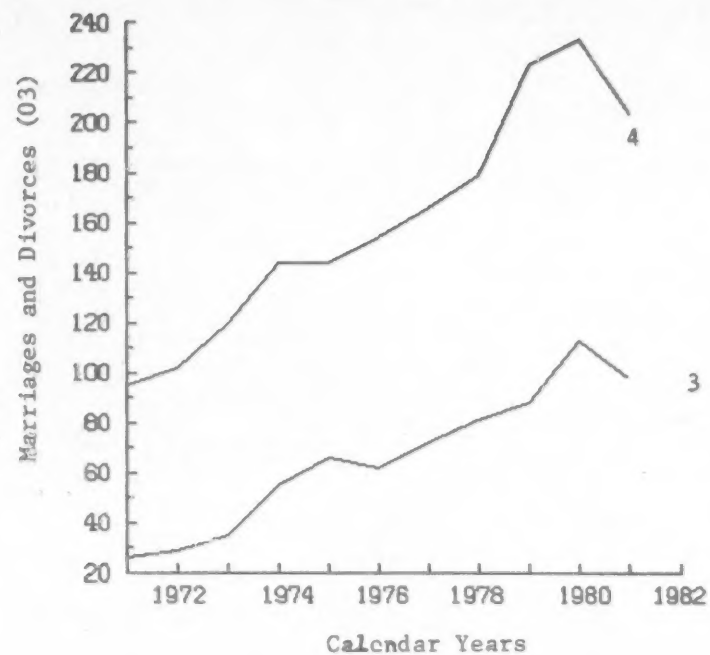
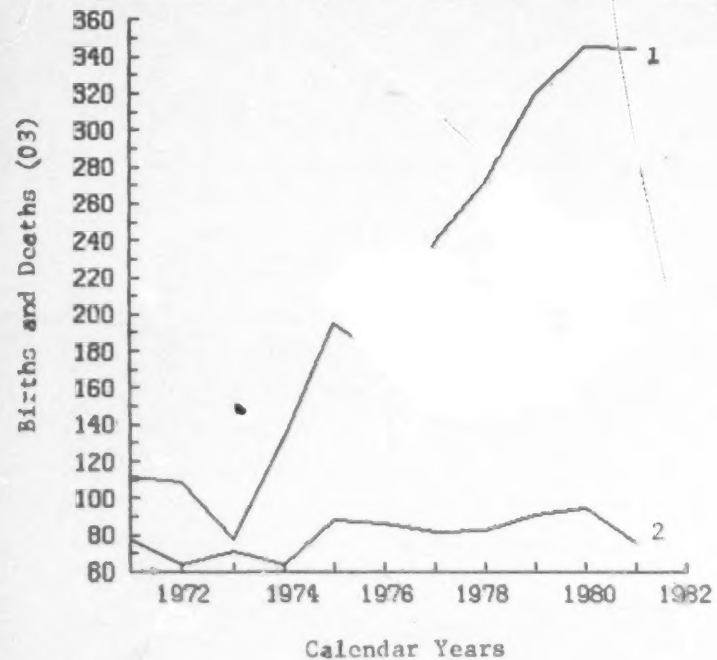
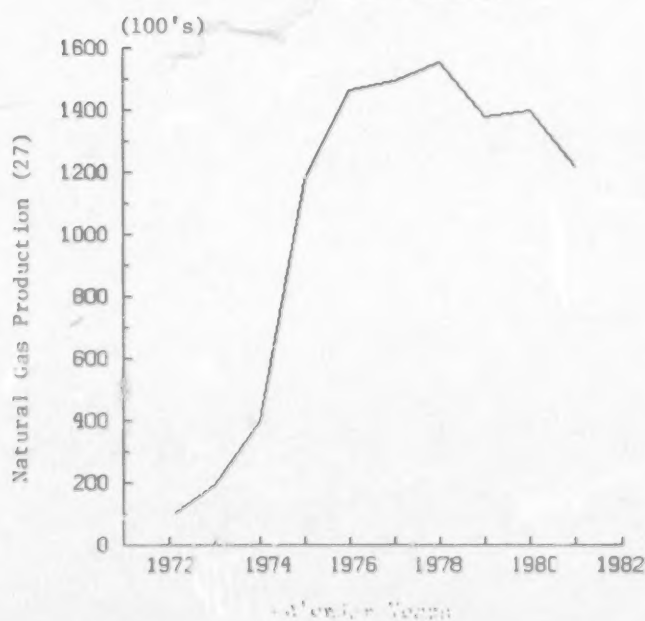
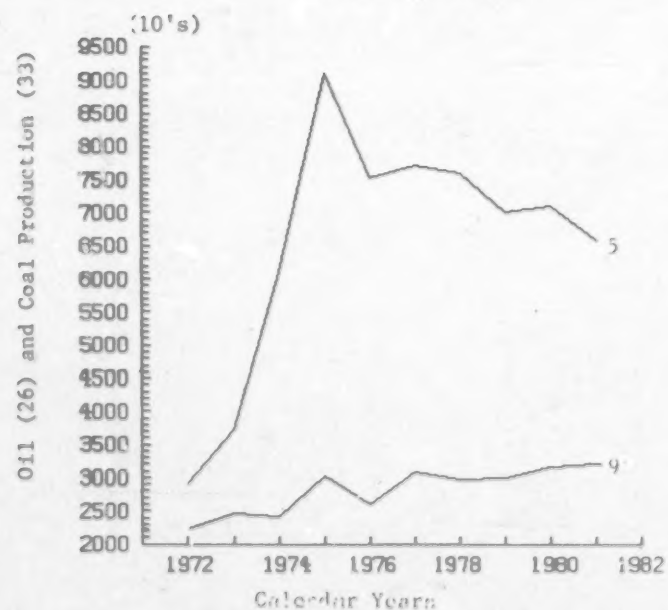
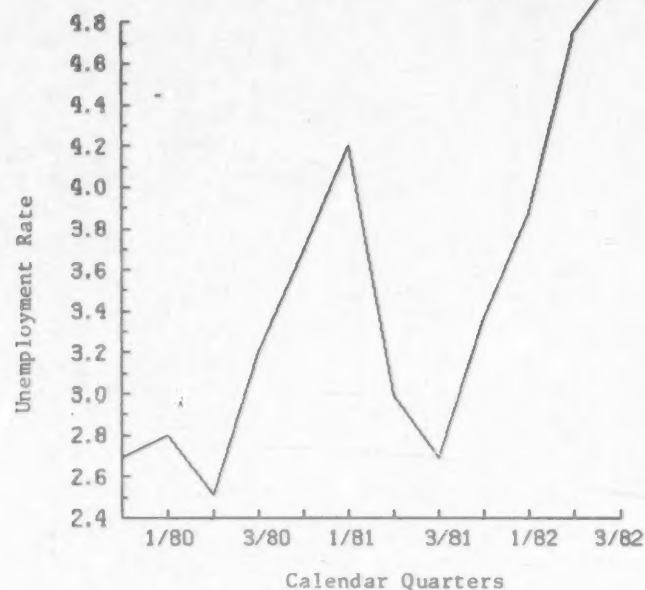
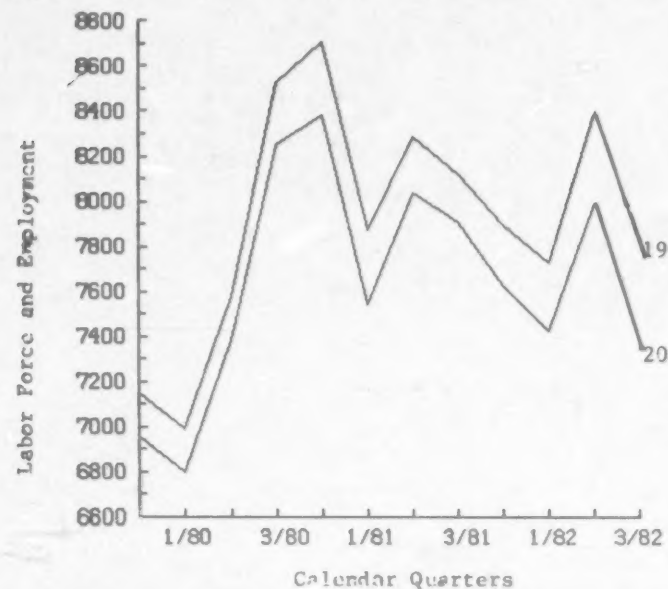


Figure 11b. Converse County On-Line Data Base

51



across the North Platte, ferries were operated, and a settlement was established. In 1849, gold fever, for a time, overwhelmed the Deer Creek settlement, as record numbers of people passed through to seek their fortunes in California.

Brigham Young's glowing words of praise for the Deer Creek area brought Mormon settlers in 1853. Many settled along a densely wooded tributary to Deer Creek now known as Mormon Canyon. There they constructed Wyoming's first known irrigation ditches and grew various crops. In addition, the Mormon settlers operated a ferry.

By 1857, Deer Creek was the most important point in the area. Wyoming's first Christmas celebration was held in the Deer Creek Stagecoach Station. Mail service was established to serve the growing number of settlers in the area, which in 1860 included the daily passage of the Pony Express. In 1861, telegraph stations also began serving the area.

The popular westward route along the Platte through Converse County was not without its drawbacks. In particular, numerous Indian raids, including massacres, burning of way stations, and cutting of communication lines, occurred in the area. Red Cloud and other Indian leaders fought many battles there. By 1862, soldiers were stationed in Deer Creek to protect the settlement. In 1867, Fort Fetterman was constructed ten miles from the current location of Douglas. The growth of Fort Fetterman and its nearby tent town shifted much activity away from Deer Creek.

The coming of the railroads in 1887 resulted in the establishment of Douglas at its present location, and the establishment of Glenrock near Deer Creek. In that same year, Converse County, named for the Wyoming territorial treasurer, was organized with the town of Douglas as the county seat. The area was already popular with stockmen because of its abundant water and nutritious native grasses, and with the arrival of the railroads that resource could be fully developed. Until the 1970's, productive ranches were the backbone of Converse County's economy.

Several significant events marked the period from the turn of the century to the present. In 1905 the state legislature voted funds for an annual state fair to be held in Douglas. Beginning in 1916, development of the Big Muddy Oil Field bolstered the economy. Doug and Ralph Herrick created the mythical jackalope in 1934, which to this day draws tourists and provides local residents an opportunity to test their own story-telling skills, as well as visitors' gullibility. County merchants do a brisk business selling jackalope memorabilia ranging from hunting trophies to postcards and novelty items. In 1955, the Continental Oil Company closed its Glenrock refinery, threatening the town's very existence. A determined search for new employers produced a 100 Megawatt power plant. Pacific Power and Light Company began construction and completed the Dave Johnston Power Plant in 1956. In the 1960's uranium mining was added to the local economy. Along with other energy industries, it brought the tremendous growth of the 1970's. More on that in the next sections of this profile.

NATURAL RESOURCES

Minerals

Small quantities of bentonite, gypsum, limestone, copper, vermiculite, lead, and chromite are known to exist in Converse County. The latter four were actually mined at one time. Small amounts of tungsten, asbestos, iron, jade, cobalt, jasper, and gold have also been spotted.

Uranium mining is very important to the county economy, although less so than just a couple of years ago. Currently, only the Bear Creek Mine remains operational. Uranium production in 1981 was 1.3 million tons, a decrease of 400,000 tons from the previous year.

Fossil Fuels

Converse County has long been recognized as a storehouse of fossil fuels, including oil, natural gas, and coal.

Converse County's 1981 taxable oil production had an assessed valuation of \$234.1 million, up 16.9 percent over the previous year. Meanwhile, production fell 7.1 percent. Compared to 1972, 1981 production and assessed valuation are up 126.9 and 2266.7 percent, respectively. According to DEPAD's 1982 Mineral Yearbook, output and valuation are expected to decline gradually into the foreseeable future.

Natural gas production and assessed valuation slipped a bit in 1981 compared to 1980. Production was off 12.9 percent and valuation fell 4.6 percent. Production in 1972 was insignificant. The long-term outlook is for production and valuation to increase throughout Wyoming.

Coal production and value of output have grown fairly steadily throughout the period shown in Table 11. Compared to 1972, 1981 coal production is up 44.7 percent. During the same time assessed valuation increased 722.0 percent. Between the two most recent years of data, production and valuation went up 2.1 and 31.6 percent, respectively. Coal production is expected to continue to increase throughout Wyoming, especially in the Powder River Basin, part of which lies in Converse County. The Antelope Coal Company has proposed a new surface coal mine for 7642 acres of gently rolling plains located 55 miles north of Douglas. Under current plans, the mine would increase the population of Converse County by 1345 people by 1990.

Land

Approximately 25 percent of Converse County's 4235 square mile area is publicly owned. Of the total area, the 1978 Converse County Land Use Plan classifies 97.9 percent as agricultural, with 90.7 percent of the agricultural land being used for unirrigated grazing. In perspective, the urban areas of Douglas and Glenrock together take up only 0.2 percent of the county's total land area.

Water

Drainages of Converse County serve several major river systems including the Little Powder, Little Missouri, North Platte, and Cheyenne Rivers. Only the town of Douglas currently withdraws any North Platte water for municipal use. Most of the county's irrigated agriculture occurs along tributaries of the North Platte.

Groundwater is used mainly for livestock watering and domestic purposes. The other five to ten percent of groundwater use is for secondary oil recovery.

THE PEOPLE

The county's population ballooned from 5938 in 1970 to 14069, an increase of 136.9 percent. As was indicated visually by the cover of the Summer, 1982 WQU, that was the largest percentage increase in Wyoming. The Department of Administrative and Fiscal Control estimates that Converse County's population has grown another 12.2 percent since 1980. In 1980, 37.69 percent of the population lived in rural areas (outside towns of 2500 persons or more) of the county, roughly the same as the statewide rural percentage.

During the 1970's births exceeded deaths by about 1100, indicating that 86.5 percent of the county's growth was due to net immigration. The influx of people was related to exploration for and development of coal, oil, natural gas, and uranium, and the construction of related support facilities. That most of the immigrants were young workers is reflected in median age data, and the age-by-sex pyramid depicted in Figure 12. In 1970, Converse County's media age was 31.3 years; 4.1 years higher than for all of Wyoming. In 1980, the county's median age stood at 25.1 years; 2.0 years less than statewide.

That most of the surge in energy development began late in 1973 is clearly indicated in the marriage, divorce, and birth data. Between 1973 and 1974 they increased by 20.0, 57.1, and 69.2 percent, respectively. From 1973 to 1981, they increased 70.0, 180.0, and 342.3 percent, respectively.

THE ECONOMY

Total personal income (Table 12) increased 717.6 percent (283.7 percent in real terms) between 1970 and 1980. The dominant role of the mining sector in causing the growth is evident. It increased from 9.41 percent of personal income in 1970 to 49.91 percent in 1980. Other important sectors included government, retail trade, and construction. Agriculture, the dominant sector in 1970, went from 19.31 percent of total personal income to 3.22 percent in 1980.

The county's proximity to Casper, Wyoming's largest city, may account for its relatively small trade and service sectors. Casper can offer a much wider range of goods and services than either Douglas or Glenrock, so Converse County residents will make many of their purchases there. The per capita income in Converse County increased from \$3510 (#10 in Wyoming and 4.8 percent below statewide) in 1970 to \$11,014 (#8 in Wyoming and 1.3 percent above statewide) in 1980. In real terms, per capita income increased 47.3 percent between 1970 and 1980.

By Wyoming standards, the most recent data for Converse County reflect the impact of the nation's economic woes. The 5.0 percent unemployment rate recorded for 3/82 is nearly twice the 2.7 percent rate of 3/81. Sales and use tax collections during 3/82 were off 11.7 percent from 3/81. However, business at county lodging establishments experienced the usual third quarter increase, and tax collections by those establishments was even up 3.2 over 3/81. Interestingly, even with the recent difficult times, AFDC and Food Stamp Recipients have not increased as fast as the population. Between fiscal years 1974 (when the major growth of the 1970's began) and 1982, AFDC and Food Stamp recipients increased 87.2 and 33.3 percent, respectively. After adjusting for inflation, AFDC payments increased 58.2 percent between fiscal years 1974 and 1982, substantially less than the increase in the number of recipients.

Figure 12: Converse County ; Age by Sex in 5 Year Age Groups ,1970 ,1980

Age Group

1970

5938 = Total Population

> 85
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4

Females

Males

1980

14069 = Total Population

> 85
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4

Females

Males

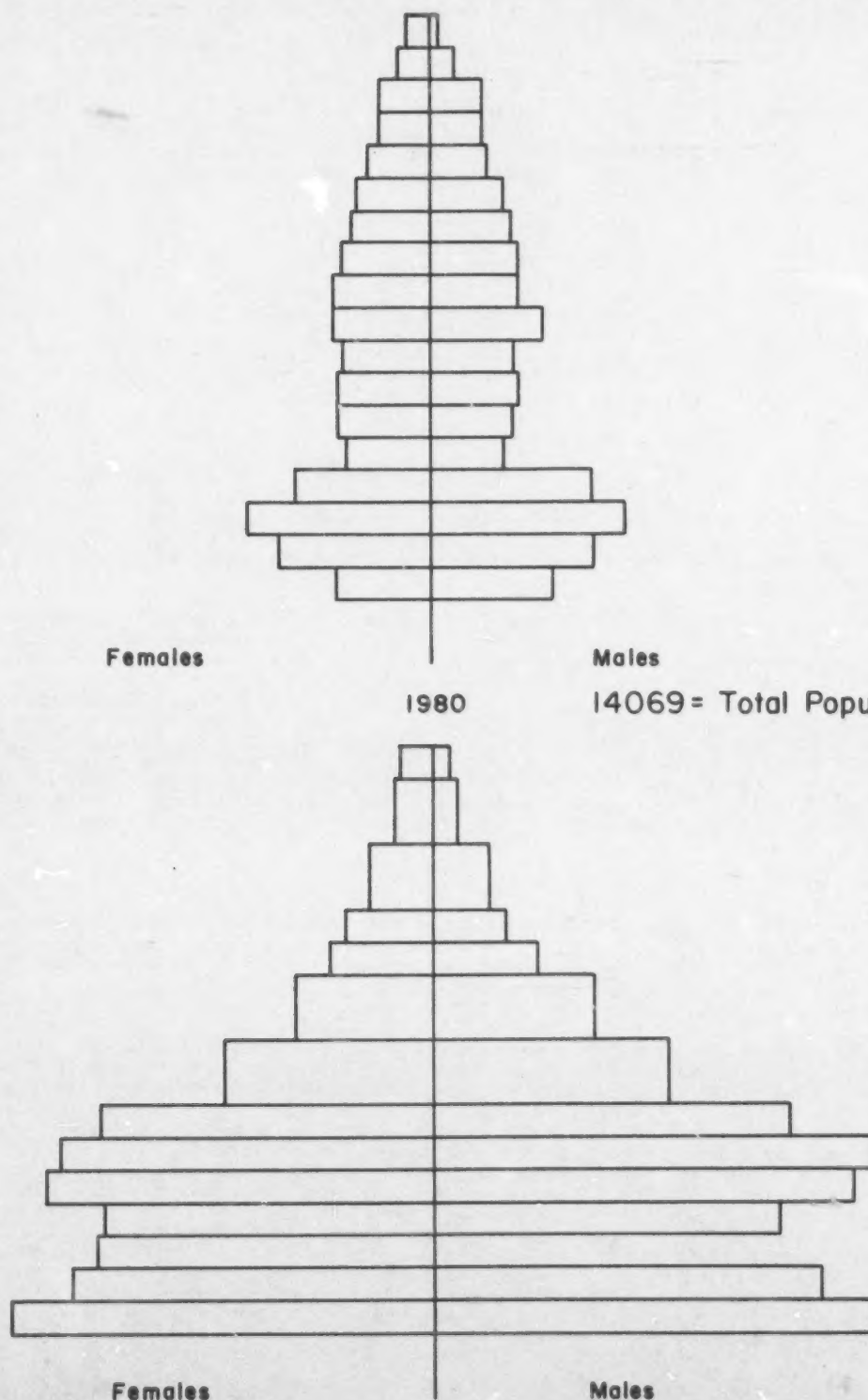


Table 12: Personal Income by Major Source (Thousands of Dollars)*

Source	Wyoming 1980		Converse County 1980		Converse County 1970	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	99980	2.46	4240	3.22	3110	19.31
Ag Serv., For., Fish, and Other	13143	.32	509	.39	162	1.01
Mining	1015626	24.99	65737	49.91	1516	9.41
Construction	464577	11.43	12963	9.84	1794	11.14
Manufacturing	196636	4.84	2413	1.83	91	.56
Transportation & Public Utilities	415770	10.23	D#	---	2724	16.91
Wholesale Trade	193476	4.76	1993	1.51	147	.91
Retail Trade	382244	9.41	9750	7.40	1838	11.41
Finance, Insurance & Real Estate	137457	3.38	2811	2.13	420	2.61
Service	458014	11.27	D#	---	1310	8.13
Government	687257	16.91	12744	9.68	2997	18.60
Total	4064180		131713		16109	

*REIS Data

#Not Shown to avoid disclosure of confidential information data are included in totals

OUTLOOK

Converse County is one of several Wyoming counties which will continue to grow through development of energy resources. Barring major technological breakthroughs and upheavals in the Middle East, oil production will continue to decline gradually, and with more or less constant real prices, the value of output will decline also. However, the long-run outlook is for significant increases in demand for coal and natural gas, an increase which Converse County can help meet. Even the ailing uranium industry may see some revival. United Nuclear Corporation has proposed a new Morton Ranch mine and mill, and by 1986 existing stockpiles will be down enough to boost demand.

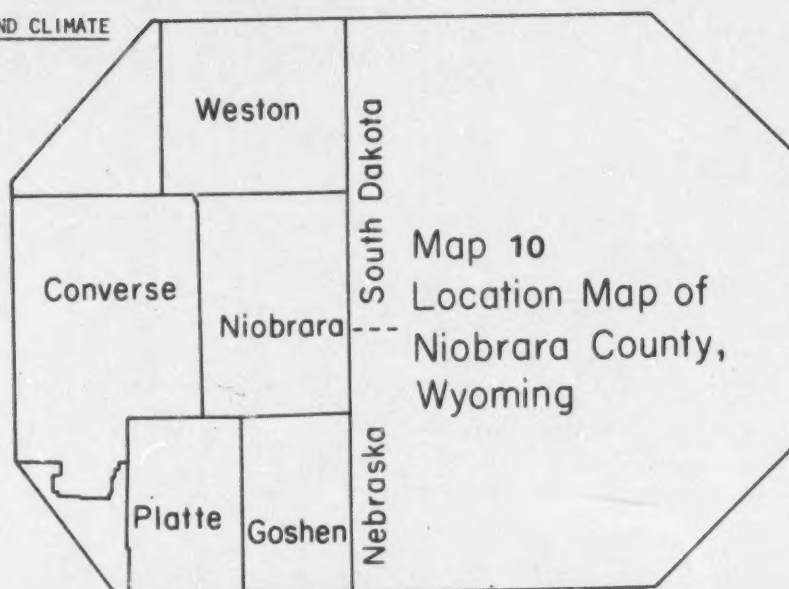
Tourism is also likely to be a growing industry. Not only does Converse County have its own unique attractions (i.e. the Jackalope, the Wyoming Catfish, Laramie Peak, and Historical Sites and Museums), but it remains an important westward passageway. Now travellers are bound for the natural wonders of Yellowstone, and mountains such as the Grand Tetons, the Big Horns, the Wind Rivers, and the Absarokas.

Niobrara County Profile

by Ruth Tebbutt

PHYSICAL CHARACTERISTICS AND CLIMATE

Niobrara County, occupying a land area of 2,613 square miles, is located in the center of the counties covering Wyoming's eastern border. It is adjoined by Weston County to the north, Converse County to the west, Platte and Goshen Counties to the south and the states of South Dakota and Nebraska to the east (Map 10,



Elevation varies from over 5,000 feet above sea level on the south western edge to 3,000 feet, the lowest point in the state of Wyoming, at the northern edge. From this topographical characteristic it follows that Niobrara County is primarily a land of gently rolling plains, which slope to the east. The county is divided at the Hat Creek Breaks, with the northern two-thirds flowing north-east into the Cheyenne River and the southern third flowing southeasterly into the Niobrara River. This division marks a separation between land uses: to the north of the Breaks is predominantly livestock grazing, while to the south exists livestock grazing with a significant amount of dry-land and irrigated farming.

The climate of Niobrara County is classified as semi-arid, demonstrated by extremes of summer heat and winter cold and by moderately low rainfall. The average annual temperature is 46 degrees, with a range of average daily temperatures from 71 degrees in July to 24 degrees in January. The average length of the growing season is 115 days, with the average date of the last freezing temperature on May 26, and the first freezing temperature on September 18. Temperatures and the length of the growing season vary over the county with respect to elevation, generally with lower temperatures and a shorter growing season at the higher elevations. Seventy-five percent of the precipitation measured falls between April and September, comprising the normal growing season. The mean annual precipitation measured at Lusk is 15 inches and ranges from 10 inches to the east to more than 16 inches to the west. Snowfall varies from 30 to 65 inches in the plains to much more in the mountains. A dry atmosphere and low snowfall assuredly help to make the wide range in temperatures less noticeable.

HISTORY

Archaeologists have traced the first evidence of habitation in Niobrara County to the southwest part of the county. These earliest residents were first thought to be Spaniards who were in the area (extending into adjacent counties) termed "Spanish Diggings" to dig for gold. It is now believed that they were possibly aboriginal. Other early inhabitants include Indians considered to be a part of the migration from Asia to Alaska. Desert conditions kept the stay of these people short, thus leaving the area virtually uninhabited until improved climatic conditions enabled the late Prehistoric Indian to set up a prosperous "buffalo economy." It was not until the mid 1870's that white men inhabited what is now Niobrara County. Travelers and trappers were not attracted to the prairie land, basically reserving the area as Indian Territory.

In 1866, the first cattle drive was made from Texas to Montana. An estimated 800,000 head of longhorns came up the Texas trail through this part of Wyoming. After 1876, ranches were established along this trail, and stock cattle were obtained from the trail herds. During part of this same period, Niobrara County was also affected by the discovery of gold in the Black Hills in 1875. Transportation facilities, specifically the Cheyenne and Black Hills Stage Line

Table 13: Niobrara County Profile

Calendar Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1. Births (03)	46.	38.	30.	42.	28.	44.	49.	40.	40.	50.	56. ¹	INA
2. Deaths (03)	39.	35.	49.	30.	30.	41.	36.	36.	34.	42.	35. ¹	INA
3. Divorces (03)	14.	20.	12.	14.	21.	16.	12.	12.	8.	17.	9. ¹	INA
4. Marriages (03)	23.	38.	42.	30.	34.	42.	27.	40.	38.	37.	32. ¹	INA
5. Oil Production (26)	INA	5524.	4998.	5567.	6279.	6607.	7269.	7501.	12510.	14067.	13844.	INA
6. Valuation of Oil Production (10)	INA	18561.	20649.	41775.	60851.	65243.	73413.	94789.	249496.	409389.	483101.	INA
7. Gas Production (27)	INA	3227.	1557.	2774.	3340.	1287.	563.	1678.	1906.	1935.	1264.	INA
8. Valuation of Gas Production (10)	INA	682.	235.	506.	427.	254.	148.	369.	432.	486.	721.	INA
9. Population (03) ²	2900.	2900.	2900.	2800.	2900.	2900.	3000.	2900.	3000.	2924.	2941.	2951.
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
10. AFDC Grants (03)	INA	140.	175.	113.	128.	157.	145.	177.	232.	237.	230.	169.
11. Food Stamp Recipients (03)	57.	92.	85.	58.	56.	61.	57.	48.	75.	122.	130.	139.
12. AFDC Payments (05)	INA	18072.	28587.	17885.	17612.	25346.	24375.	29488.	52637.	56826.	53090.	46516.
Calendar Quarters	4/79	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82
13. Hotel, Motel & Camp Sales & Use Tax (05)	3756.	6488.	8304.	11457.	6471.	5241.	8132.	13027.	5792.	6265.	8181.	12311.
14. Net Collection Sales and Use Tax (05)	152406.	182241.	212243.	209148.	188359.	187860.	198981.	195140.	202310.	218968.	208803.	214615. ³
15. Liquor Sales (05)	46044.	33433.	41020.	47913.	58485.	37165.	40552.	43178.	50320.	36588.	41641.	38000. ³
16. Gasoline Gallonage (22)	857583.	695585.	1003135.	1281730.	830195.	763899.	1068038.	1293238.	870927.	659904.	936177.	1401965. ³
17. Civilian Labor Force (03)	1229.	1067.	1299.	1346.	1283.	1190.	1488.	1488.	1370.	1274.	1623.	1495.
18. Employment (03)	1202.	1020.	1259.	1306.	1249.	1154.	1460.	1445.	1335.	1216.	1552.	1410.
19. Unemployment (03)	26.	47.	40.	41.	34.	36.	28.	43.	35.	59.	71.	85.
20. Unemployment Rate (02)	2.1	4.4	3.1	3.0	2.7	3.0	1.9	2.9	2.6	4.6	4.4	5.7

¹Provisional data from the Wyoming Department of Public Health, Division of Vital Statistics.

²1971 through 1979 are estimates made by the U.S. Bureau of the Census, not an actual count as in 1980. 1981 and 1982 are estimates made by the Department of Administration and Fiscal Control.

³Estimate based on trend and July and August data.

Figure 13a: Niobrara County On-Line Data Base

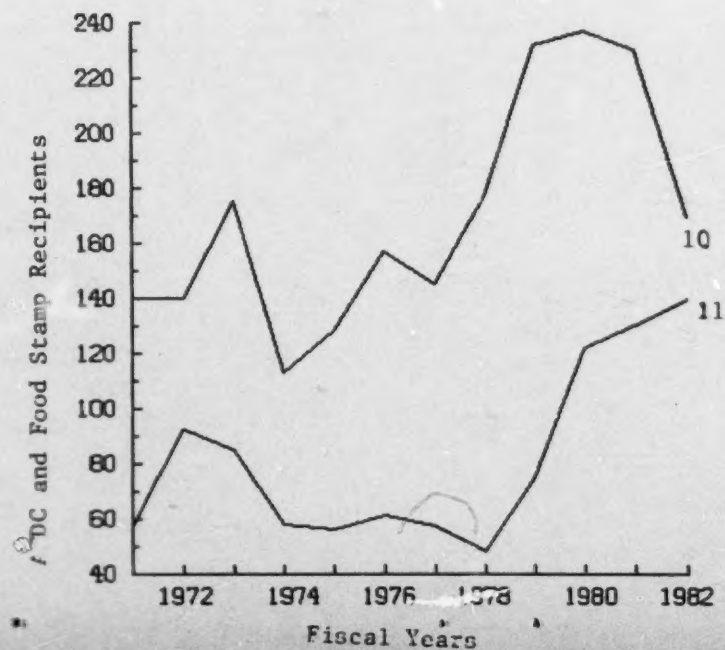
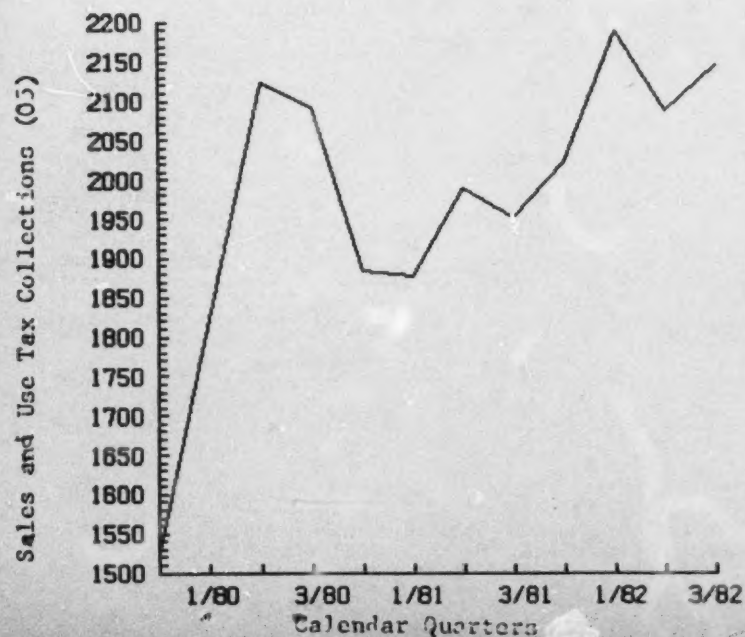
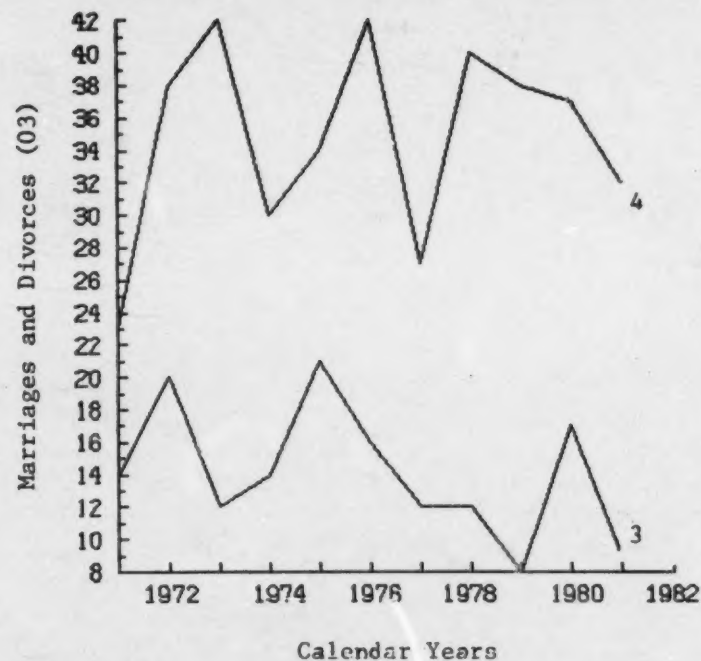
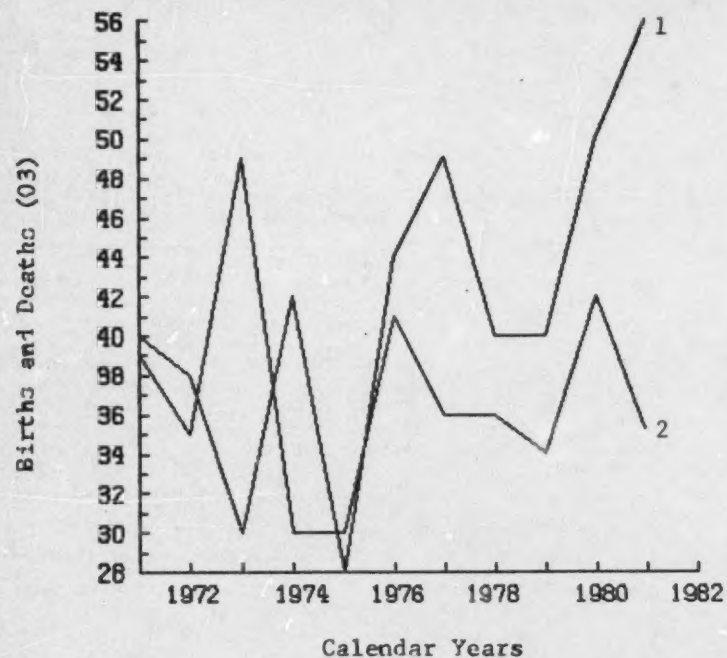
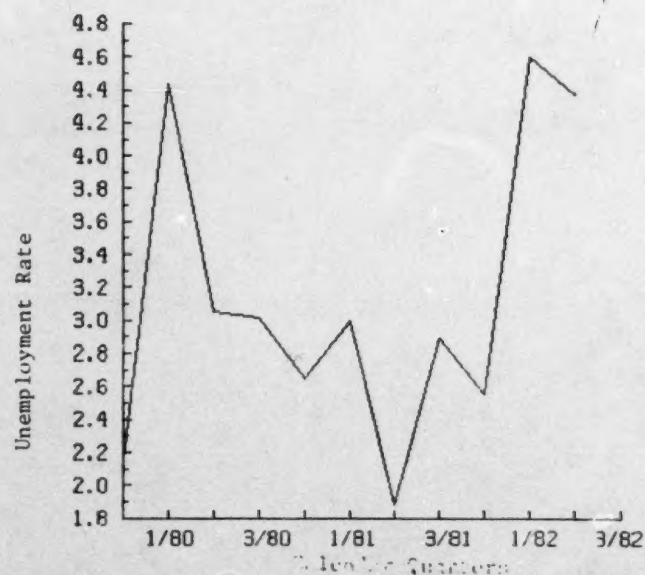
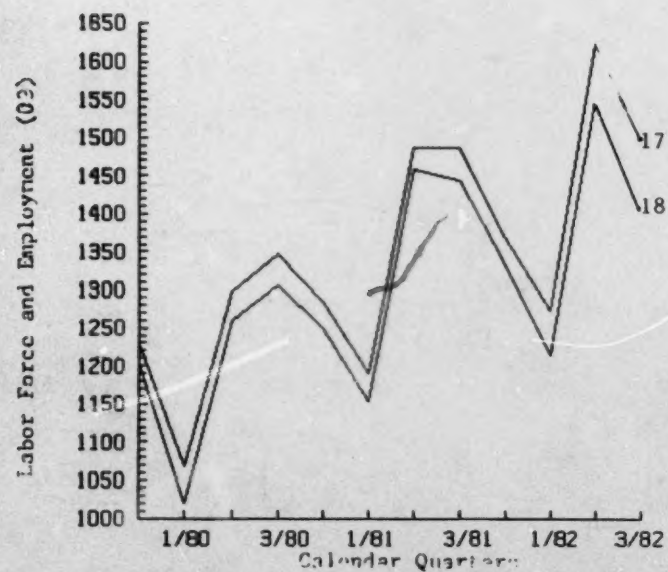
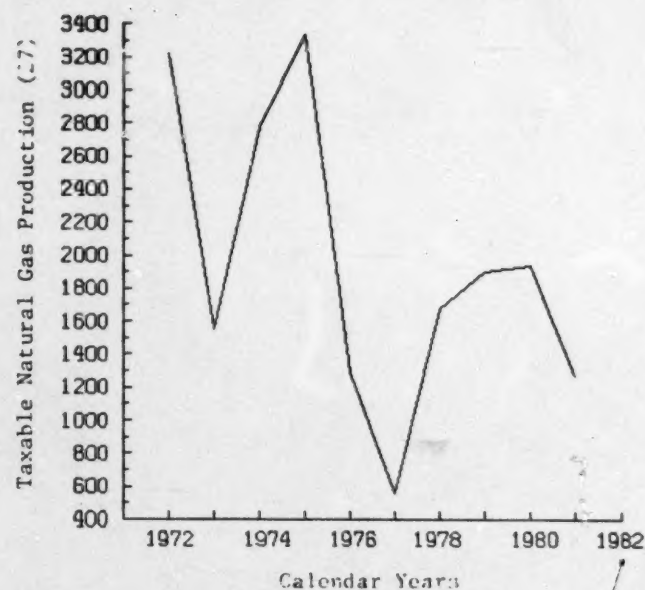
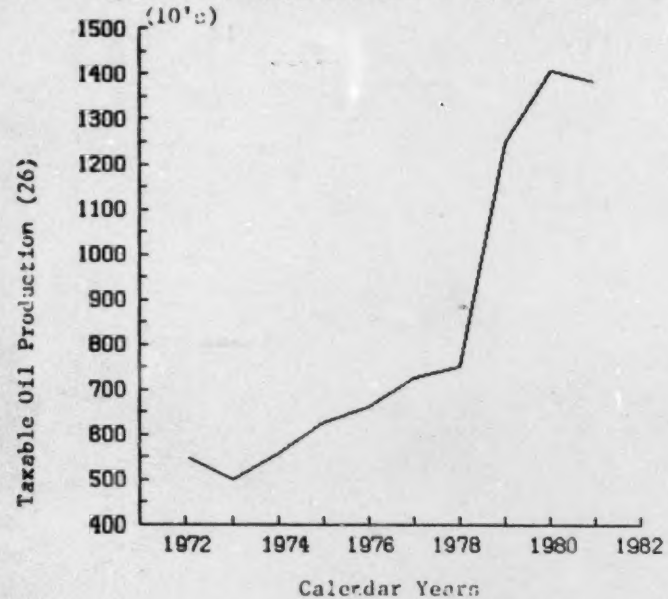


Figure 13b: Niobrara County On-Line Data Base

59



linking Black Hills gold fields with the Union Pacific Railroad at Cheyenne, began to develop. Further development came with the early mining activity in this immediate area. In 1884, copper mining began at Rawhide Butte, and between 1884 and 1898 the Great Western Mining and Milling Company operated a mill at the present site of Lusk.

Tent sites became established towns with the construction of a branch of the Chicago Northwestern Railroad System across the southern portion of the county. One of these towns was Lusk, soon to become the county seat. The railroad platted the town, which received its name from Frank S. Lusk, a local rancher who sold lots along the right-of-way.

Lusk isn't the first name the settlement has had. At first, when it was located about two miles west of its present site, and was merely a stage stop, it was called Running Water. Later, Silver Cliff and New Rochelle were used. In recent history, during the early 1960's, Lusk businessmen proposed changing the town's name once more. Plans were pushed to give the town a more "glamorous" name, a name more in keeping with the west's traditions: "Rawhide." Proposals for the new name were not passed, however.

At the time that Wyoming became the 44th state of the Union, what is now Niobrara County was part of Converse County. In 1911, the Wyoming legislature cut seven new counties out of the thirteen first established, including Niobrara; Lusk was made the county seat. Recent news reports suggest that Niobrara is once again facing being merged with another county. A state legislative reapportionment plan, approved by the 1981 Legislature, allows Niobrara County to keep its single state representative (a compromise from earlier opposition to the subject) and to share a state senator with neighboring Goshen County. Residents who are openly opposing this "taxation without representation", feel that if their county loses its state representative, it is only a matter of time before the county is dissolved and merged with another county. At this writing no decision has been sustained.

Aside from the few attempts at mining (mentioned above), the economy of Niobrara County was primarily agricultural. The large sheep, cattle, and horse ranches which had been established in the 1880's were overrun by farmers. Dry-land farming of corn and wheat was attempted by the first permanent settlers; however, the arid climate drove many of the farming homesteaders out, and the livestock industry again dominated the County's economy. Since this time, dry-land farming has regained some of its importance. The development of strip farming and means of irrigation from ground water (developed in the late 1960's and early 1970's) has helped farming become an important economic factor in the area.

Niobrara County remained an agricultural economy until 1917 when oil was discovered at Lance Creek. The field developed over the years, and became the largest producer in Wyoming from 1939 to 1945. During the mid-1950's production diminished and a water flooding program was started to salvage as much production as possible. Oil production continues at Lance Creek and elsewhere in the county, but at a minor level.

NATURAL RESOURCES

Minerals

The Geological Survey of Wyoming lists the following mineral occurrences in Niobrara County: bentonite, beryl, coal, copper, helium, iron, limestone, oil and gas, selenium, stone, and uranium. Of these, oil and gas have been the most important.

As mentioned above in the history section, Niobrara had the largest producing oil field in the state during the 1940's. The oil boom is gone from this area, and the county is now one of the smaller producers in the state, accounting for only one percent of the state's oil production. Looking at the county independently, Table 13 shows that oil production in 1981 fell for the first time in seven years, declining 22,265 barrels below 1980 production. Unit valuation of oil rose over \$5.00 per barrel.

Taxable natural gas production also fell from 193,523 MCF to 126,423 MCF, representing a 34.67 percent decrease in 1981 below 1980. Unit valuation of gas more than doubled. According to the Department of Economic Planning and Development, Niobrara County's natural gas production (accounting for less than a mere .05 percent of the state's production and oil production is so small that the county is not a reliable indicator of trends in state production.

Other minerals which were once or are now considered to have commercial potential include granite, limestone and metals. At Jay Em, south of Lusk, a sizable stone cutting operation existed. Large agate, marlite, jasper, and petrified wood slabs were cut, finished and sold. The Silver Cliff Mine (1880), located just west of Lusk in a highly mineralized area, was worked for silver and copper on a small scale. Further exploration for all types of metal has been recommended for this area. Limestone also has current commercial potential.

Land

In contrast to most of Wyoming, the federal government owns only 9.6 percent of the County. The State owns 8.1 percent and 82.3 percent is privately owned. Most of the federal land is administered by the Bureau of Land Management, 160,000 acres or 9.5 percent of the County's area, with less than 1 percent (840 acres) controlled by the Forest Service.

Water

Most of the drainage of the wind-swept high plains area of Niobrara County is intermittent. Therefore, in the absence of adequate surface water, ground water is of critical importance. Groundwater is used for domestic, stock, industrial, irrigation and other purposes. Supplies are generally found at depths above 1,000 feet; however, in a large portion of northeast Niobrara, water is difficult to find and sometimes it is as far as 26 hundred feet to water.

Major water-related developments of the last 20 years include:

- (1) the completion of 121 miles of water pipeline in the 1960's. Construction of overhead sprinklers and other means of irrigation was also part of the project. Funding was received from federal government programs formed to aid conservation in the "Dust Bowl" area of the United States, of which Niobrara County is a part;
- (2) the coal slurry pipeline, being sponsored by Energy Transportation Systems, Inc. (ETSI). One of the major test wells for the line was located in northern Niobrara County. The slurry line, which crosses Niobrara County, is not expected to affect the water on which the county irrigation wells depend; and,
- (3) the major water and sewer projects for the town of Lusk which are, at this writing, nearing completion. The water project includes a transmission line, extensive pipeline and new storage tank.

THE PEOPLE

Population in the area was reported at its peak during the 1940's, a time when Niobrara County had the largest producing oil field in the state (Lance Creek). From 1950 to 1970, however, the County experienced a decrease in population. This trend reflected the end of the oil boom and the consolidation of family-owned ranches. Since 1970, Niobrara has displayed a characteristic common to an agriculturally dominated economy, retaining a relatively stable population. The recent population figure available from the Census Bureau shows a 1980 population of 2,924 for the County.

Partly due to zero population growth, the age profile of Niobrara County is generally older. The median age in 1980 was 35.3 years, 8.2 years older than the state's median age. Another contributing factor is that Lusk appears to be acting as a place of retirement for an increasing number of people from all areas of Wyoming (Niobrara County Land Use Plan, prepared by the Niobrara County Planning Commission; December 29, 1977). Many people find the cost of living in Lusk to be exceptionally low by most Wyoming standards (ranked 23rd among 23 communities around the state by the Department of Administration and Fiscal Control), and the town has a pleasant, stable atmosphere.

One population characteristic of Niobrara County, which should be noted, concerns the lack of population concentrations. Lusk boasts 56.43 percent of the population, but because it has only 1,650 residents it still does not gain recognition as an "urbanized area." Manville and Van Tassel are towns of 94 and 10 residents, respectively. Truly a part of rural America, Governor Ed Herschler recently described Niobrara as "the Appalachia of Wyoming" (the Laramie Daily Boomerang; October 5, 1982).

ECONOMY

From 1970 to 1980, personal wage and salary income increased 45.97 percent. With no individual source showing outstanding changes within the 10 year period, this increase can not be attributed to any one sector of Niobrara's economy. In addition, agriculture, government, and retail trade maintained their positions as leading sources of total personal income in the County.

Agriculture, historically the economic backbone of Niobrara County, is still a dominant economic force. Although the percentage value of total personal income belonging to farm income has decreased 11.62 percentage points, the overall economic contribution of agriculture remains strong. Government, ranking second in 1970, captured the largest percentage (19.04 percent) of total income generated in 1980. Remaining as the third major sector of the economy in Niobrara County is retail trade, accounting for \$2,228,000 of total personal income.

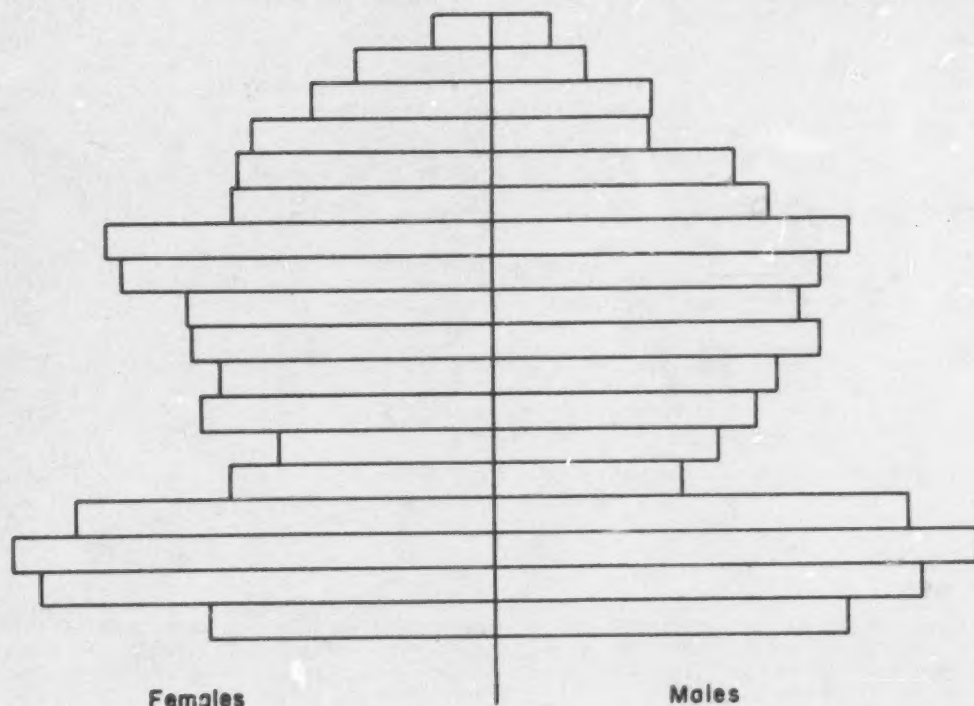
Figure 14: Niobrara County ; Age by Sex in 5 Year Age Groups, 1970, 1980

Age Group

1970

2924 = Total Population

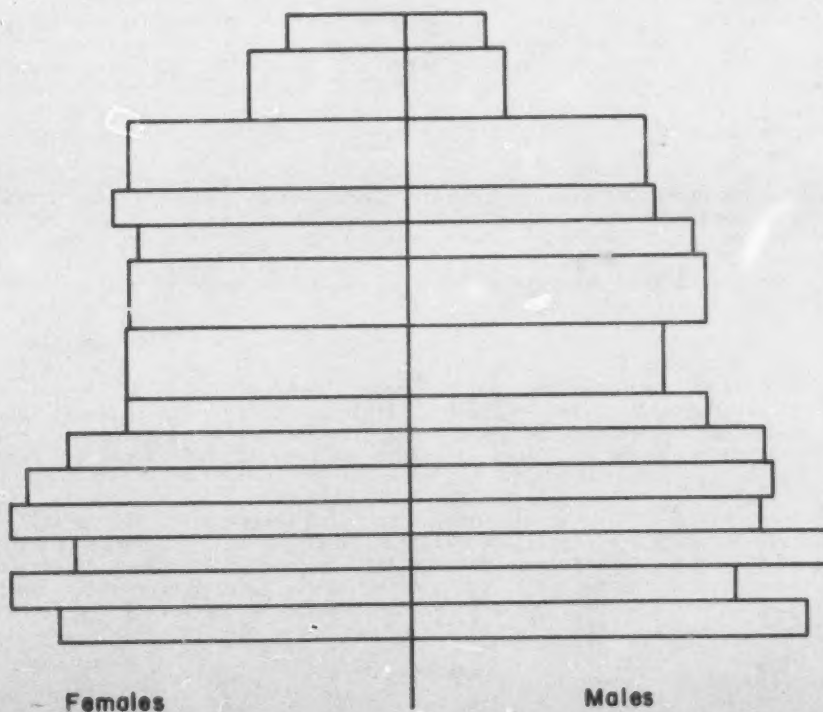
> 85
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4



1980

2924 = Total Population

> 85
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4



OUTLOOK

The general outlook for Niobrara County seems to be "business as usual." It does not have any known natural resources which would precipitate a boom as was seen during the 1940's, nor is it within easy proximity of energy development areas. Agricultural activity is likely to remain stable, maintaining the position as a principal economic force--though consolidation of farms and ranches will cause the percentage of individuals employed directly or indirectly in agriculture to decline. Judging from estimates projected by the Department of Administration and Fiscal Control (see Table 13), the population of Niobrara County will remain essentially the same as at present, showing only negligible increases.

Table 14: Personal Income by Major Source (Thousands of Dollars)*

Source	Wyoming 1980		Niobrara County 1980		Niobrara County 1970	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	99980	2.46	2706	18.48	2331	30.10
Ag Serv., For., Fish, and Other	13143	.32	169	1.15	90	1.14
Mining	1015626	24.99	1923	13.13	720	9.10
Construction	464577	11.43	621	4.24	584	7.38
Manufacturing	196636	4.84	529	3.61	184	2.33
Transportation & Public Utilities	415770	10.23	1226	8.37	450	5.69
Wholesale Trade	193476	4.76	287	1.96	L#	---
Retail Trade	382244	9.41	2228	15.22	1252	15.83
Finance, Insurance & Real Estate	137457	3.38	556	3.80	263	3.32
Service	458014	11.27	1608	10.98	679	8.58
Government	687257	16.91	2788	19.04	1270	16.05
Total	4064180		14641		7911	

*REIS Data

L#Less than \$50,000, data are included in totals

A major change which can be foreseen concerns the state's legislative redistricting plan. The plan, approved by the 1981 Legislature, provides a special seat for Niobrara County, which with 2,924 has less than half the population needed to qualify for a seat under the reapportionment population plan. It allows Niobrara to keep its single state representative and to share a state senator with Goshen County. Residents argue that the plan violates the doctrine of "one man, one vote," and that losing their state representative would lead to further decisions resulting in Niobrara County being merged with another county. The decision in the Niobrara case is likely to affect other counties as well.

Key to Units Code

01 THOUSAND BOARD FEET	17 AVERAGE DAILY NUMBER OF VEHICLES
02 PERCENTAGE	18 MILLION MILES
03 NUMBER OF INDIVIDUALS	19 FATALITIES PER MILLION MILES
04 THOUSAND KILOWATT HOURS	20 THOUSAND CUBIC FEET
05 DOLLARS	21 KILOWATT HOURS
06 MILLIONS OF DOLLARS	22 THOUSANDS OF GALLONS
07 BILLIONS OF DOLLARS	23 TEN THOUSANDS OF DOLLARS
08 THOUSANDS OF DOLLARS	24 NUMBER OF INDIVIDUAL CRIMES REPORTED
09 NUMBER OF HOUSEHOLDS	25 HUNDREDS OF THOUSANDS OF DOLLARS
10 HUNDREDS OF DOLLARS	26 HUNDREDS OF BARRELS
11 SHORT TONS	27 HUNDREDS OF MCF
12 THOUSAND SHORT TONS	28 \$ PER TON
13 MILLION CUBIC FEET PER DAY	29 \$ PER MCF
14 THOUSAND BARRELS PER DAY	30 \$ PER BARREL
15 INDIVIDUAL VISITORS	31 VEHICLE
16 GALLONS	32 HUNDREDS OF INDIVIDUALS
	33 HUNDREDS OF SHORT TONS

Bibliography

I. Page 17 - Table 1:

A. Series 1, 2, 5, 6
U.S. Department of Energy. Energy Data Reports, Mining and Minerals: Gas and Coal. U.S. and WY. Gas data are in a monthly publication, U.S. and WY. coal is a monthly publication.

B. Series 3, 4
The Oil and Gas Journal. US Oil and Wyoming Oil Production. Weekly publication.

C. Series 7-18
Data covering 1972 to 1981: Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal year report. Projections for 1982 and 1983: Legislative Service Office. "Taxes on Wyoming's Minerals History and Projections." Annual report.

II. Page 21 - Table 2:

A. Series 1-14
Wyoming Crop and Livestock Reporting Service. Bi-Weekly Ag Statistics. U.S. and Wyoming Crop, Livestock and Commodity prices. Prices received and paid by U.S. Farmers and Ranchers. Reporting monthly.

B. Series 15, 16
Wyoming Crop and Livestock Reporting Service." Wyoming Agricultural Statistics 1982." Annual Report.

III. Page 23 - Table 3:

A. Series 1-6
Monthly Visitor Use Reports. Data received from Park Service. Parks and Monuments Covered: Bighorn, Devil's Tower, Fort Laramie, Fossil Butte, Grand Teton, and Yellowstone. Monthly Reports.

B. Series 7

Traffic Survey Unit - Planning Branch Wyoming State Highway Department. "Selected Recording Stations Traffic Counter Data." Published monthly.

C. Series 8

Wyoming Dept. of Revenue, Sales and Use Tax Division. Sales and Use Tax Summary by County, Hotel, Motel, and Camp Sales Tax Collections. Published Monthly.

D. Series 9

Petroleum Association of Wyoming. The Gasoline Gallonage Report. Gasoline consumption by county.

IV. Page 25 - Table 4:
Employment Security Commission of Wyoming. Labor Force Trends. Published quarterly.

V. Page 27 - Table 5

A. Series 1-3
Secretary of State. New and Foreign Corporations. Monthly Report.

B. Series 4-6

Cheyenne Credit Bureau. Wyoming bankruptcy cases, business failures, and value of failures. Weekly publication.

VI. Page 29 - Table 6:

A. Series 1-3
F.W. Dodge Division of McGraw Hill. "Dodge Construction Potential," Wyoming nonresidential and residential construction data. Published monthly.

B. Series 4, 5

Institute for Policy Research. "Local Construction Reports." Survey of authorized construction in selected cities. Received monthly.

VII. Page 31 - Table 7:

A. Series 1-8

Reports to IPR from selected electrical companies doing business in Wyoming. Residential, Industrial, Commercial, and Agricultural, Municipal, and other public electric usage and connections. Received monthly.

B. Series 9-16

Reports to IPR from selected gas companies doing business in Wyoming. Residential, Industrial, Commercial, and Agricultural, Municipal, and other public natural gas usage and connections. Received monthly.

C. Series 17-18

Reports to IPR from telephone companies doing business in Wyoming. Business, private and total telephone connections. Received monthly.

VIII. Page 33 - Table 8:

A. Series 1, 2

R.L. Polk and Co. Motor Statistical Division. "National New Vehicle registration Service." New Truck Registration in Wyoming, New Car Registration in Wyoming. Reported monthly.

B. Series 3, 5

Business Week. United States Personal Income, Wyoming Personal Income. Reported monthly.

C. Series 4, 6, 7

Dept. of Commerce, Bureau of Economic Analysis. Survey of Current Business, Current Business Statistics. Consumer Price Index, U.S. Disposable Personal Income. Reported monthly.

D. Series 8

Wyoming Liquor Commission Sales Data, reported to IPR. Received monthly.

IX. Page 37 - Table 9

A. Series 1-4

Wyoming State Bank Examiner Report. Banking and Finance: Demand Deposits, Total Deposits, and Total Loans.

B. Series 5, 6

Federal Home Loan Bank of Seattle. monthly comparative statistical analysis of member institutions. Mortgage loans and savings in saving and loan associations. Data received monthly.

X. Page 39 - Table 10:

A. Series 1-5

Uniform Crime Reporting Center for Criminal Justice Research Division of Criminal identification office of the Attorney General. "Crime in Wyoming." Quarterly report.

B. Series 6

Wyoming Dept. of Revenue and Taxation, Sales and Use Tax Division. "Net Collections by Business Class by County." Published monthly.

C. Series 7

Annual Report: Department of Revenue and Taxation, Ad Valorem Tax Division, Tax distributions. Fiscal year reports.

D. Series 8,9

Annual Report: Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal Year report.

E. Series 10-12

Wyoming Division of Public Assistance and Social Services. Management Information and Statistical Report. Published bi-annually.

XI. Page 49 - Table 11

A. Series 1-4

Wyoming Department of Public Health, Division of Vital Statistics. "Vital Statistics." Yearly.

B. Series 5-10

Annual Report: Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal year report.

C. Series 11

Regional Economic Information System, Bureau of Economic Analysis. Population data included in table of "Personal Income by Major sources."

D. Series 12-14

Wyoming Division of Public Assistance and Social Services. Management Information and Statistical Report. Published biannually.

E. Series 15

Sales and Use Tax Summary by County. Hotel, Motel, and Camp Sales Tax Collections. Wyoming Dept. of Revenue, Sales and Use Tax Division. Published Monthly.

F. Series 16

Net Collections by Business Class by County. Wyoming Dept. of Revenue, Sales and use Tax Division. Published monthly.

G. Series 17

Sales by County-City. Wyoming State Liquor Commission. Published monthly.

H. Series 18

The Gasoline Gallonage Report. Petroleum Association of Wyoming. Gasoline consumption by county. Published monthly.

I. Series 19-22

Employment Security Commission of Wyoming. Labor Force trends. Published quarterly.

XII. Page 57 - Table 13

A. Series 1-4

Wyoming Department of Public Health, Division of Vital Statistics. "Vital Statistics." Yearly.

B. Series 5-8

Annual Report: Department of Revenue and taxation, Ad Valorem Tax Division. Fiscal year report.

C. Series 9

Regional Economics Information System. Bureau of Economic Analysis. Population data included in table of "Personal Income by Major Sources."

D. Series 10-12

Wyoming Division of Public Assistance and Social Services. Management Information and Statistical Report. Published biannually.

E. Series 13

Sales and Use Tax Summary by County. Hotel, Motel, and Camp Sales Tax Collections. Wyoming Dept. of Revenue, Sales and use Tax Division. Published monthly.

F. Series 14

Net Collections by Business Class by County. Wyoming Dept. of Revenue, Sales and Use Tax Division. Published Monthly.

G. Series 15

Sales by County-City. Wyoming State Liquor Commission. Published monthly.

H. Series 16

The Gasoline Gallonage Report. Petroleum Association of Wyoming. Gasoline consumption by county. Published monthly.

I. Series 17-20

Employment Security Commission of Wyoming. Labor Force Trends. Published quarterly.

Format

For data available at least quarterly, the last 12 quarters are printed in WQU. In this edition, published series begin with the 4th quarter of 1979, and end with the 3rd quarter of 1982. For other data series (primarily annual), the most recent observations, up to 12, are published in WQU. Most annual data series will reappear in WQU only when updated, or about every fourth issue. Quarters are calendar quarters. For example, the 3rd quarter is composed of July, August, and September. In the table headings and narratives, a particular quarter will be indicated by notation such as 2/80 (2nd quarter, 1980), 1/80 (1st quarter, 1980), and so on.

Beside each data series name is a two-digit number in parentheses. The number is a data value units (such as dollars, tons, feet, miles, etc.) code. The key to the units code follows the last county profile page. Following the units code page is a bibliography of data sources, listed by WQU page number of the data.

Throughout WQU, all data are for the state unless otherwise stated. The most recent year's data should be viewed as preliminary, due to revisions. The acronym "INA" signifies that information is not available. Some graphics are used to illustrate trends. When more than one trend line appears on a graph, the line will be labeled with a number which matches the number of a data series on the accompanying table.

The reader should be attentive to the footnotes at the bottom of pages, particularly those accompanying a data table. The footnotes help the reader to properly interpret the data, and they also indicate when more detailed (by subject or by area) data than that which is shown is available from IPR.

RECENTLY PUBLISHED WYOMING RELATED RESEARCH REPORTS

THE WYOMING ECONOMY: HISTORICAL TRENDS AND PROJECTIONS
by Shelby Gerking and John Merrifield
Available in February, but order now

No Charge

ANALYSIS OF THE LONG-TERM IMPACTS AND BENEFITS OF GRAND
TETON NATIONAL PARK ON THE ECONOMY OF TETON COUNTY, WYOMING
by John Merrifield and Shelby Gerking
Available now

\$5.00*

EXPORTATION OF STATE AND LOCAL TAXES: A COMPARATIVE ANALYSIS
by Shelby Gerking, William Morgan, and John Mutti
Available now

\$5.00*

*Prices reflect reproduction costs only.

HOW TO ORDER

Please mail your order together with payment (if necessary) to:

INSTITUTE FOR POLICY RESEARCH

Box 3925, University Station

Laramie, WY 82071

ATTN: Beth Daniels

Thank you

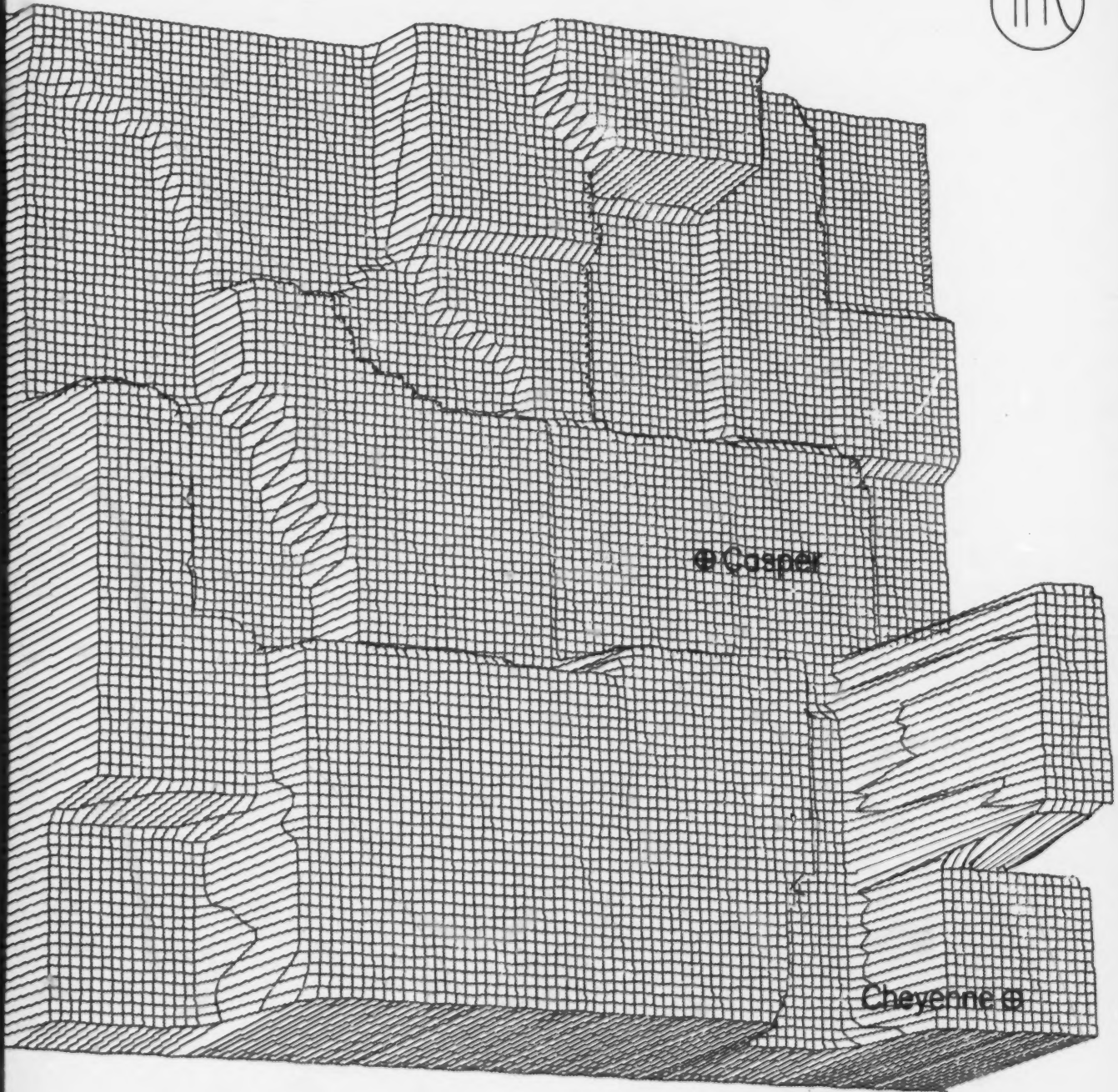
BEST AVAILABLE COPY

47550-24

Spring 1983

Vol. 2, No. 3

Wyoming Quarterly Update



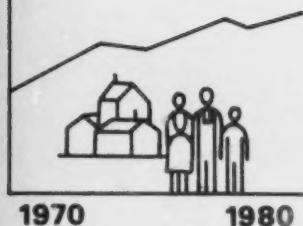
Percent of 1981 County Employment in Labor Unions

CRIS

Census Retrieval Information Service

P.O. Box 3925
Laramie, WY 82071
(307) 766-5141

Room 302
Emerson Building
Cheyenne, WY 82002
(307) 777-7504



U.S. Census information for Wyoming is handled by the Census Retrieval and Information Service (CRIS). CRIS issues printed reports of Wyoming Census data as well as handling specific requests. Much of the population and housing data from the 1980 Census is now available.

CRIS reports now available:

PRICE

- | | | |
|-----------|---|-----------|
| #82-9-2: | STF3, September 1982, 13 pages. List of tables available from STF3 tape. Partial labor force and income data for state, counties, and cities. | No Charge |
| #82-8: | Age Distribution in Wyoming, 1980, August 1982, 120 pages. Analysis of age profiles in 5-year brackets. | No Charge |
| Wyoming: | Comparison with USA and with 1970. Indications of net in-migration by age. Prediction of 1990 peak at ages 30-34. | |
| Counties: | Mans of age distribution. Graphs of age profiles for each county. | |
| Cities: | Age profile for each city. | |
| #5: | STF1, October 1981, 54 pages. 100% count data, 1980 population and housing: state, counties and cities. | No Charge |
| #6: | Laramie People Patterns, January 1982, 11 pages. Minority distribution in Laramie by zoning and by age of neighborhood. | No Charge |

CRIS is a cooperative service provided by the Institute for Policy Research, University of Wyoming, and the Research and Statistics Division, Wyoming Department of Administration and Fiscal Control.

We are looking forward to assisting you in the future.

Judy Denison and G. Fred Doll
Institute for Policy Research
University of Wyoming

Phil Kiner
Research and Statistics Division
Department of Administration and
Fiscal Control

Institute for Policy Research
Office of Research and Graduate Studies
University of Wyoming

Table of Contents

Introduction	1
Table of Contents	11
WYOMING SCENE	
Overview and Perspective	1
Minerals Outlook	3
Agricultural Outlook	7
Job Openings Outlook	8
COUNTY PROFILES	
Goshen County Profile	10
Platte County Profile	19
DATA GRAPHS AND TABLES	
Energy and Mineral Production	
Map 3 and 4	29
Figure 5	30
Table 5	31
Agriculture	
Figure 6	32
Table 6	33
Tourism	
Figure 7	34
Table 7	35
Map 5 and 6	36
Employment and Labor	
Map 7 and 8	37
Figure 8	38
Table 8	39
Business Conditions	
Figure 9	40
Table 9	41
Construction	
Figure 10	42
Table 10	43
Map 9 and 10	44
Map 11 and 12	45
Utilities	
Figure 11	46
Table 11	47
Consumers	
Figure 12	48
Table 12	49
Comparative Cost of Living Index	50
Economic Base Multipliers for Wyoming Counties, Discussion	51
Banking and Finance	
Figure 13	52
Table 13	53
Government	
Figure 14	54
Table 14	55
Gasoline Gallonage by County, 1971-82: Map 13 and 14	56
Sales and Use Tax Collections by County, 1970-82	58
SBE Assessed Valuation by County, 1970-82	59
Locally Assessed Valuation by County, 1970-82	60
Cigarette Tax Distributions by County, 1970-82	61
A Message for Our Readers	
Accessing the WQU Database	62
Changes to Follow the Questionnaire Responses	62
Key to Units Abbreviations	63
WQU Format Description	63
Recently Published Wyoming-Related Research Reports	64
Project Manager.....	John Merrifield
Editorial Advisors.....	G. Fred Doll
	Shelby Gerking
Word Processing.....	Ema Shenefelt
Editorial Assistance.....	Beth Daniels
Research Aide.....	Ruth Tebbutt
Graphics: Cover Page, Figures 2, 4, Maps 1-2.....	UW Graphic Arts Services
Figure 1, 3, 5-14, Maps 3-13.....	Computer Graphics Package
Wyoming Quarterly Update is published four times per year in autumn, winter, spring, and summer editions.	
The articles appearing in this publication represent the opinions of the authors and do not necessarily reflect the views of the state of Wyoming or the University of Wyoming or their respective executive officers. Duplication or quotation of material in this publication is welcomed, but it is requested that WQU, the Institute for Policy Research, University of Wyoming, be credited.	

Wyoming Quarterly Update

Wyoming Quarterly Update (WQU) represents the efforts of the Institute for Policy Research (IPR) at the University of Wyoming to provide improved data access services. The data presented in WQU are assembled from secondary sources, such as government agencies and private industry. The staff of IPR greatly appreciates the ongoing cheerful cooperation of each of the data sources listed in the bibliography.

WQU provides current economic indicators and timely, easily accessible data. Most of the data published in WQU are updated quarterly with the most current numbers. The complete data sets from which WQU originates are maintained, together with documentation by IPR. Readers are encouraged to contact IPR to find out how to gain access to data which does not appear in the WQU. Many data series, such as gasoline sales and taxation data, span more than 30 years. Numerous other series cover 20 years or more.

Efforts to expand the subject and geographic detail (county level data) of data sets will be made continuously. Featured for the fifth time in this edition are county profiles. Current data, graphics, and discussion are presented for Goshen and Platte counties in this edition. Each subsequent edition of WQU will feature three to four county profiles. At that rate, each Wyoming county will be covered every two years. Current plans are to cover Sweetwater, Sublette, Hot Springs, and Park counties in the next WQU (July, 1983). No firm plans have been made to present particular counties in the September, 1983, WQU. Suggestions by readers will be considered in making that decision.

The cover page of each edition features a contour map which illustrates the geographic distribution of a particular variable. This edition features a contour map which contrasts the percentage of each county's employment which is in a labor union. The data range from 35.9 percent in unions in Platte County to 2.5 percent in Teton County. On the cover page of the Winter, 1983 WQU we goofed. The cover map depicted not 1981 percent of employment in labor unions (which was stated), but instead indicated the percent of total 1981 state employment in each county.

First-time readers of WQU should refer to the "Format" (last page) for an explanation of abbreviations and table formats.

For additional information, to make suggestions, or to request data, contact WQU project manager John Merrifield at:

The Institute for Policy Research
University Station, Box 3925
Laramie, WY 82071
(307) 766-5141

OTHER IPR SERVICES AND RESEARCH REPORTS ARE LISTED ON THE LAST PAGE OF THIS WQU.

WYOMING

SCENE

Overview and Perspective

by John Merrifield

As 1982 came to an end the nation's economy hit bottom and bounced. That at least was the assessment of Treasury Secretary Donald Regan following the announcement on March 2 that the Commerce Department's Index of Leading Indicators jumped 3.6 percent in January (ABC Evening News, 3/2/83). It was the largest one-month advance in the index in over 30 years, and it was the fifth straight month in which the index pointed up. Among the twelve individual components of the leading index, all but one advanced. Among those rising components, the most encouraging ones were significant increases in the length of the average work week, new orders for consumer goods, and building permits. In particular, a longer average work week is a prerequisite for an improvement in the nation's unemployment rate. New workers will not be hired until workers already on the payroll are fully utilized.

With the nation near the depths of the worst economic downturn since the Great Depression of the 1930s, the sum total of human misery is high and at its peak. Programs are being put in place at the national level to ease some of the pain, and certainly the nation has a much better social safety net in place than in the 1930s. At this writing, the congress was completing work on a \$5 billion aid package, which it is hoped will be enacted and implemented swiftly, and accelerate the nation's economic recovery. Because much of the aid package only speeds up already scheduled public works' projects, much of the \$5 billion added to the current year's federal deficit should be reflected in a roughly equal reduction in next year's deficit.

On a brighter note, the end of a recession can mark the beginning of a long period of prosperity and robust economic growth. Purchased at a terrible cost in human suffering, the rate of inflation has been reduced to its lowest level in over 10 years. During December, actual price deflation was recorded, resulting in an inflation rate of only 3.9 percent for all of 1982. Beginning this year the housing component of the consumer price index (CPI) has been revised to emphasize rental rates rather than costs associated with the purchase of a new home, such as new home prices and mortgage interest rates. With that revision, the CPI rose at a modest 2.4 percent annual rate in January. Without the revision, inflation was zero in January. For all of

1983, the Association of Business Economists sees an inflation rate of 5 percent (US News and World Report (USNWR), 3/7/83).

Also during the past two years, legislation lowering taxes and providing new incentives for investors has been enacted. Threatening the positive effects of lower inflation and investment incentives are the huge federal budget deficits. The government's demand for credit has very little immediate significance during a recession. The private sector's appetite for credit is small. Despite current budget deficits around \$200 billion per year nominal interest rates continue to decline, although much more slowly than a few months ago. On February 25, CBS News reported a one-half point cut in the prime interest rate of several major banks. The move from 11.0 to 10.5 percent was quickly followed by most remaining major banks. However, it should be noted that real interest rates remain quite high. With price deflation at a 1.1 percent annual rate during 4/82, a prime interest rate of 11.0 percent really represents a real interest rate in excess of 12.0 percent; a real rate at or near the all-time high.

During times of economic recovery the deficits can be very detrimental. Competition for credit intensifies and interest rates are bid up, driving many potential investors from the market. That in turn reduces economic growth. The degree to which such a scenario materializes will depend upon actions of the president and the congress to narrow the gap between revenues and expenditures, and the effect of the recovery itself on tax revenues and outlays.

While events in the political arena unfold, a recovery appears to be under way, and at a pace in excess of the rate initially forecast by most economists. Lower oil prices have provided additional momentum. According to Treasury Secretary Donald Regan, for each 10 percent drop in crude oil prices, the nation's GNP increases by as much as a full percentage point, and half a million jobs are created (ABC News This Week, 2/27/83). Secretary Regan predicted a \$25-\$30 per barrel price for crude oil by the end of March, about a 20 percent decrease from the OPEC benchmark of just a few months ago. The stock market responded to the lower oil prices and other economic indicators by successively setting and then breaking records for the all-time high of the Dow-Jones Industrial Average. On March 7 the 1140 mark was surpassed (ABC Radio News, 3/7/83).

So far, the nation's industries hardest hit by the recession are leading the way to recovery. In January, automobile production was up 10 percent (Wall Street Journal (WSJ), 2/17/83), and automakers built 63 percent more autos in early February than during the same period a year ago (USNWR, 2/28/83). Auto sales also increased 2 percent between January and February (USNWR, 2/28/83).

In January, housing sales increased for the fifth straight month, this time by 15.5 percent (CBS Radio's "Today in Business," 2/25/83). As a result of the shrinking inventory of unsold new homes, lower mortgage interest rates, and an improved economic outlook, home builders stepped up their activities. Housing starts jumped 35.9 percent between December and January (WSJ, 2/17/83), and at the same time applications for new building permits increased 15.9 percent (USNWR, 2/28/83), suggesting continued increases in home construction activity. The whopping increase in housing starts was the biggest jump in that indicator since September, 1979, and boosted the construction pace to an annual rate of 1.716 million new units (USNWR, 2/28/83); still slightly below the 2 million units per year pace believed to be necessary to accommodate the nation's long-run population growth.

A drawdown of business inventories of 0.6 percent in December and 1.1 percent in November (USNWR, 2/28/83) has given the nation's factories, utilities, and mines a much needed boost. The recession had depressed production to nearly two-thirds of full capacity. After increasing a modest 0.1 percent in December, capacity utilization surged 0.9 percent in January (WSJ, 2/17/83).

Even the nation's unemployment rate, usually the last indicator to reflect an economic recovery, seems to have turned the corner. After peaking at 10.8 percent of the civilian labor force in December, the unemployment rate fell to 10.4 percent in January (USNWR, 3/7/83), and remained there in February (ABC Radio News, 3/4/83). Still, despite what Secretary of Commerce Malcolm Baldrige characterized as a quicker-than-expected recovery, 1983 is not likely to see the nation's unemployment rate fall much below 10 percent (ABC Radio News, 3/5/83).

While the Wyoming economy is still in better shape overall than the nation's economy, the immediate outlook is less positive. Wyoming's unemployment rate reached 8.0 percent in December and nearly reached double-digits at 9.9 percent in January. Nationwide, the recession officially began in July of 1981, while in Wyoming the data appear to indicate a lag of a full year before the ripple effects of the nation's economic slump seriously impacted Wyoming. Thus, the situation could continue to deteriorate slightly well into the second quarter of this year.

Lower gasoline prices and the nation's economic recovery will give Wyoming's tourism industry a big boost as early as late May, and that could well mark the beginning of a recovery in Wyoming's economy. However, a recovery in Wyoming's economy is not likely to really gather

momentum until activity in the state's mining industries rebounds. Recent layoffs in Sweetwater and Carbon County suggest that such a rebound is not imminent. Wyoming's trona, coal, bentonite, gypsum, wood products, and taconite industries will benefit from the rebound of the nation's housing and auto industries. Still Wyoming's entry into the recession lagged the nation by a year, so it is likely that an exit from the recession will probably lag the nation by about the same amount. Thus, a robust turnaround in Wyoming's mining industries and hence a recovery for the entire state economy is not likely to be forthcoming until the fourth quarter of this year.

While it is widely believed that the benefits of lower oil prices are much greater than the costs nationwide, it is also true that what is good for the nation is not necessarily good for all its parts. The net impact of lower oil prices on Wyoming remains uncertain. It remains to be seen how low they will go. In any event, the state treasury and local governments expect to lose a combined \$15 million in severance tax, property tax, and mineral royalty revenues for each dollar drop in crude oil prices. As the Minerals Outlook on the next pages of this WQU suggests, lower prices will depress exploratory drilling, which in turn will reduce future production. The impact on current production is uncertain. Even while prices were increasing, output continued to fall. There are significant positive side effects of lower oil prices for Wyoming's economy. Tourism is Wyoming's second most important industry, and the vast majority of the state's visitors arrive by automobile. Lower fuel prices will help attract more visitors. The lower crude oil prices will help the nation's auto and housing industries, which as just mentioned will aid several of Wyoming's industries. Energy and mineral industries are discussed in greater detail in the following pages.

Spring Minerals Outlook for Wyoming - 1983

OVERVIEW

by Gary B. Glass, State Geologist, Wyoming Geological Survey

Falling oil prices dominate the petroleum scene. U.S. spot crude prices reportedly were \$26.90 - \$28.15/barrel for sweet crude and \$1.00 - \$1.75 lower for sour crude in late February (Oil and Gas Journal, volume 81, no. 9, February 28, 1983). Although oil price cuts may not alter Wyoming's oil production in the short term, the cuts are responsible for at least a portion of the downturn in drilling activity. Wyoming's rig count was at a seven year low in February. The current reduction in exploration and development, however, could affect production a few years in the future.

The price cuts are a more immediate concern to Wyoming than the downturn in drilling activity. Reduced crude oil prices mean reduced revenues from both taxes and royalties paid to the State. Couple the falling prices with the gradual decline in production that is forecast for oil, and the effect on revenue is magnified. Until oil prices stabilize, their full effect will remain speculative.

Crude oil prices also can affect Wyoming's gas production. Fuel oil prices are already low enough to compete with higher priced gas, and may edge out part of the market for natural gas. Also, as evidenced by Amoco's March shut in of 150 gas wells in southern Wyoming, pipeline companies are trying to reduce their contracts for higher priced gas. While renegotiated or cancelled gas contracts may shut in more high priced gas, the resultant production losses could be offset by improved markets for cheaper old gas. Even though these offsetting possibilities may result in no net gain or loss in forecast gas production, production of lower priced gas will again reduce the State's tax and royalty revenues.

Because market conditions for Wyoming coal have apparently not worsened since 1982, this year's production is still forecast at 112 million tons - a 3.7 percent increase over the 108 million tons produced in 1982. Although 1982's production was actually two percent better than predicted in our year end forecast, that percentage only reflects the inaccuracy of our forecast and does not reflect any real upturn in demand. Similarly, 1982's 5 percent increase in production is still 4 percentage points less than the increase recorded in 1981.

Most of the increased coal tonnage that is forecast for 1983 simply reflects the initiation of long term contracts signed five or more years ago. The state's 1983 production will probably be 14 percent below contract demand. Excess mine capacity for 1983 is estimated at approximately 87 million tons (Figure 1). The average FOB mine price for Wyoming coal was \$12.57 in 1981. Average coal prices are currently forecast at \$13.20 in 1982 and \$13.86 in 1983 (Figure 2).

In 1983, demand for soda ash (trona), iron ore, limestone, and gypsum should reflect any improvements in the national economy. Bentonite, on the other hand, is dependent enough on oil and gas drilling activity that significant changes will probably mirror the status of the petroleum industry. Aggregate (sand, gravel, ballast, clinker, etc.) production will primarily depend on the levels of highway construction and railroad maintenance. Uranium production,

4

however, will remain at low levels, and may even decline further with the closure of the Sweetwater mine. Although further layoffs in the uranium industry are possible, some workers may be recalled as individual producers adjust to their contracts and demand.

Although there will be some exploration for metals and diamonds in Wyoming this year, unless gold and silver prices improve, exploration will fall short of earlier expectations.

OIL AND GAS UPDATE

by Alan VerPloeg, Staff Petroleum Geologist, Wyoming Geological Survey

The recession and falling oil prices continue to put a damper on drilling in the State. The rig count at the end of February had dropped to its lowest level in seven years, with only 72 rigs running. This represents a 60 percent drop over the past year. Wyoming is not the only western state experiencing such declines as rig activity in Utah, Colorado, Montana, and North Dakota is well below that of a year ago. Even drilling in the Overthrust Belt of western Wyoming has declined. For example, Chevron, which had as many as 40 rigs running a few years ago, has 10 or less rigs this year. In addition, many petroleum forecasters feel the decline has not bottomed out.

In March, Amoco shut in 150 gas wells in southern Wyoming after Northwest Central Pipeline Company refused to accept the gas because of excessive carbon dioxide content. A spokesman for the pipeline company also noted that the terminated contract would substantially reduce the company's gas costs because cheaper gas was available from Kansas. Various news articles placed the average gas cost from Amoco's wells between \$5.93 - \$6.80 an MCF. The 150 wells, which reportedly account for about one-half the gas Northwest Central buys from Wyoming, produce about 17 billion cubic feet of gas. Amoco termed the shut in as temporary, and does not expect to lay off any of the 30 employees at their Wamsutter office.

On a more positive note, officials with Amoco Production indicate that by 1987 the Overthrust Belt "fairway" should contribute up to 180,000 barrels of oil per day and 1.3 billion cubic feet of gas daily. Amoco estimates that the discovered resources in the "fairway" may be as high as 1.7 billion barrels of oil equivalent.

Early in February, Monsanto announced plans to drill a 26,000 feet deep well in the Madden Area of Fremont County (No. 1 Joyce - section 4, T. 38 N., R. 91 W.). This well could break the Rocky Mountain depth record of 25,764 feet held by the 1-34 Pacific Creek well, which was drilled by Rainbow Resources in 1978 and 1979. The projected cost for this new Monsanto well is \$26 million. Potential payzones include the Frontier, Muddy, Dakota, Morrison, Sundance, Crow Mountain, Phosphoria, Tensleep, Madison, and Amsden.

COAL UPDATE

by Richard W. Jones, Coal Geologist, Wyoming Geological Survey

Wyoming coal production continues to set new records. Preliminary figures from the State Inspector of Mines indicate that Wyoming's 1982 production was 108 million tons, an increase of five percent over 1981's record production. Wyoming should remain the nation's third largest coal-producing state in 1982, behind Kentucky and West Virginia. For 1982, Wyoming should also maintain its position as the leading state in strip-mined coal production (one-fifth of the nation's surface-mined coal was from Wyoming in 1981). Also, more coal was produced from Federal leases in Wyoming than from any other state (over 60 percent of Wyoming's 1981 production was from Federal leases). It is probable that Wyoming's 1982 production will again exceed one-eighth of the total coal mined in the United States.

There are now 25 active coal mines in Wyoming: the Powder River Basin gained three more mines in 1982 for a total of 16 mines; the Hanna Basin, which lost two active mines in 1982 and another mine in 1983, now has only three active mines, including the only underground mine in the State (Carbon County mine); the Leucite Hills mine, operated by Prospect Point Coal Company, opened in the summer of 1982 and is the third active mine in Sweetwater County; Lincoln County still has two active coal mines; and Hot Springs County has only one active mine. Campbell County alone accounted for over 75 percent of the State's coal production in 1982, and collectively, the coal mines in Wyoming's Powder River Basin produced more than 80 percent of the State's coal. With the addition of Wyoming's 1982 coal production, the State's cumulative production has exceeded one billion tons. The one billionth ton, which represents the total coal produced in Wyoming since mining began in the 1860's, was mined in September of 1982.

Federal coal activities still continue: plans for the second round of Federal coal leasing are now underway in both the Green River-Hams Fork and the Powder River coal production regions. In the Wyoming portions of these production regions, a total of 21 companies have expressed an interest in leasing more than 6.5 billion tons of coal under 368,000 acres. Thirty-one federal lease tracts containing nearly 8 billion tons of coal have been delineated. Following the ranking and selection of tracts and the completion of Environmental Impact Statements, the next

FIGURE 1. HISTORICAL WYOMING COAL PRODUCTION WITH FORECAST TO 2000

5

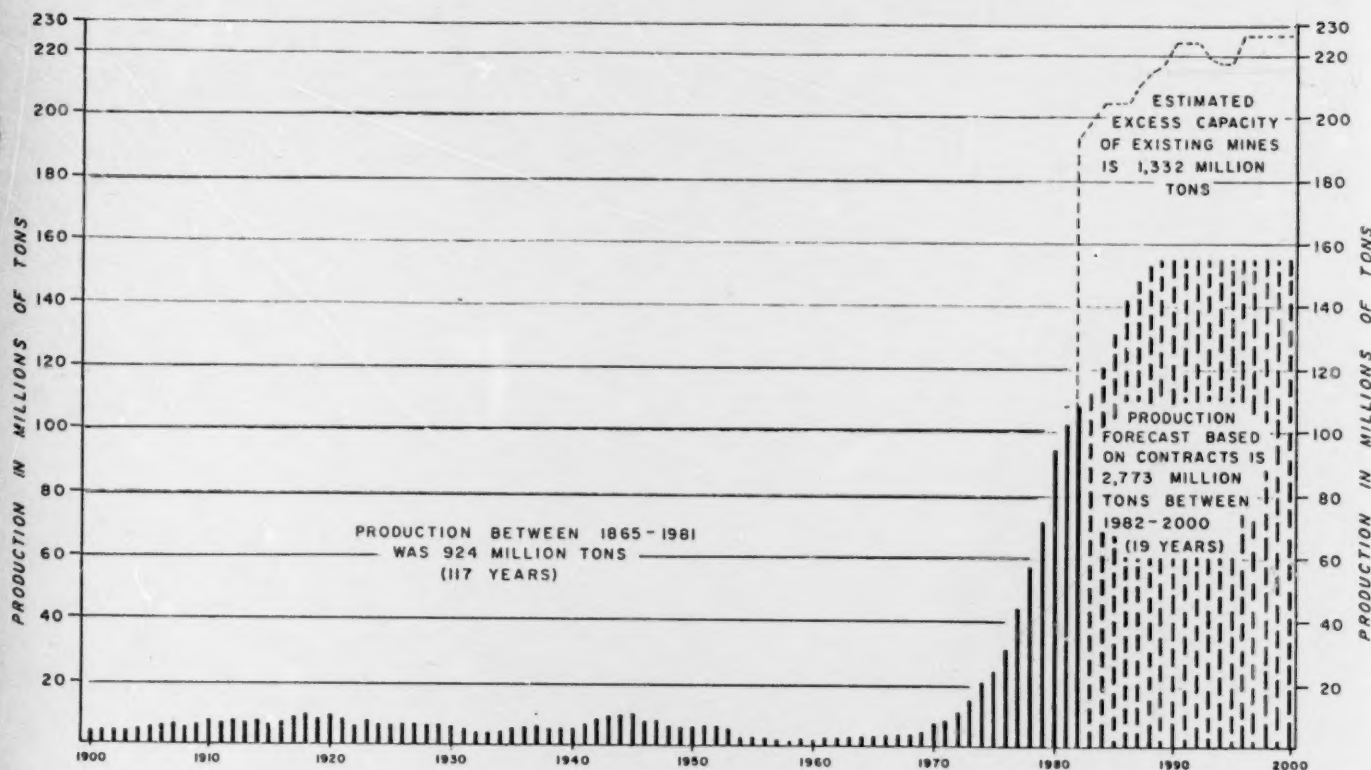
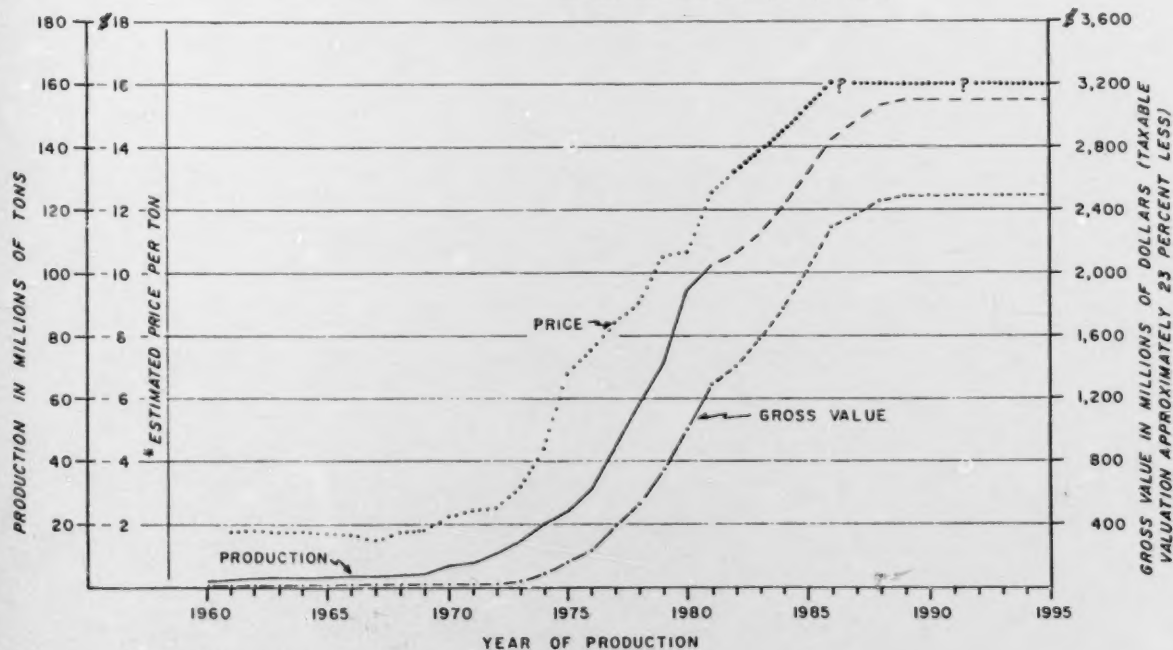


FIGURE 2. WYOMING COAL PRODUCTION, PRICE, AND GROSS DOLLAR VALUE TO 1995



ASSUMES THE PRICE PER TON IS 1.25X THE ASSESSED VALUE PER TON

WYOMING GEOLOGICAL SURVEY
FEBRUARY 1, 1983

Federal lease sales are scheduled for the summer of 1984. In another leasing-related Federal action, the U.S. Department of Interior banned all railroad company subsidiaries from acquiring any future federal coal leases. The ban was initiated late last year in response to an internal legal opinion that modified Interior's interpretation of Section 2 (c) of the Mineral Leasing Act of 1920. The change reverses a six-year-old policy that was at odds with the Justice Department's interpretation of Section 2 (c). While the National Coal Association had strongly supported the Justice Department's interpretation and had urged Interior to change its views to agree with Justice, the railroad companies had been advocating the repeal of Section 2 (c).

In 1983 legislative action, the Wyoming Legislature sent a bill to Governor Herschler that authorized a 3 percent reduction in the severance tax paid on coal mined underground. This bill reduces the current 10.5 percent tax to 7.25 percent. The bill, which may cost the State \$1 million a year in lost tax revenues was designed as an incentive for additional underground coal mining. Proponents of the bill also hoped the tax break might make Wyoming's underground coal more competitive in the Pacific Rim coal market.

Other industry news includes the sale of Cities Service's (Citco's) Dry Fork coal property, north of Gillette, to Phillips Petroleum, and the sale of Energy Development Company (owned by Iowa Public Service Company) to Arch Mineral Corporation. This latter sale prompted the layoff of another 60 miners when Energy Development's strip mining contractor, Resource Exploration and Mining, Inc., closed its mine in the first quarter of 1982.

URANIUM AND NONFUEL MINERALS UPDATE

by Ray E. Harris, Uranium and Industrial Minerals Geologist, Wyoming Geological Survey

In January, Union Oil Company announced that it will close its Sweetwater mine and mill later this year, and lay off 211 employees. This is the eighth uranium mine closure since mid-1979. Union's action results from an announced five-year delay in the construction of two nuclear power plants in Indiana. Both plants had fuel contracts with Union. With this closure, there are now eleven producing uranium mines in Wyoming. Union noted that they are only suspending operations until the plants are finished or the market improves.

Rocky Mountain Energy (RME) closed its Casper uranium exploration office in January, causing the layoff of 12 employees, and the transfer of 15 other employees to RME's headquarters in Broomfield, Colorado. This closure will not affect operations at their Bear Creek uranium mine and mill in Converse County.

The market price of uranium has increased almost 25 percent from a low of \$17.25 per pound of uranium oxide in 1982 to the present \$21.50 per pound in late February. The price, however, is not expected to show a rapid increase this year. This recent increase may reflect a reduction in mill site stockpiles as well as adjustments due to mine closures and declining uranium production during 1982.

Declining soda ash production from trona deposits near Green River, which was evident in late 1982, is apparently continuing into 1983. FMC Corporation laid off 25 employees in January. Their trona operation (the world's largest) employs about 100 fewer people than the 720 employees that worked in their mine and soda ash plant in 1981.

The bentonite industry in Wyoming is also feeling the effects of the declining demand for bentonite in oil and gas well drilling, foundry castings, and taconite (iron ore) pelletizing. Wyo-Ben laid off a number of people at their main office in Billings, Montana, and output from their bentonite mines in Wyoming is down. Other bentonite producers have experienced a decline in orders for processed bentonite.

Rallying from a decline that began in May 1981, gypsum sales increased in the latter part of 1982 and in the first two months of 1983. Sales of refined gypsum are already 4 percent over December, 1981. This rally reflects an increase in housing starts and the resultant growing demand for wallboard, first noted in October, 1982.

Story Stone Company's attempt to open a limestone quarry near Story was denied by the U.S. Department of the Interior. The company is appealing the ruling.

BASE, PRECIOUS, AND FERROUS METALS AND DIAMOND UPDATE

by W. Dan Hausel, Deputy Director, Wyoming Geological Survey

Until the end of February, base and precious metal prices had been on the upswing. In early March, however, gold dropped \$100 an ounce, and silver dropped \$4 an ounce. These large drops in precious metal prices are attributed to panicky selling following the decline in worldwide petroleum prices. Prediction of future metal prices is very difficult in the present unstable market.

Exploration for gold and silver mineralization will probably not increase unless the prices of gold (presently above \$450 an ounce) and silver (above \$10 an ounce) recover before summer. Base metal exploration, on the other hand, will probably not increase because base metal prices are still somewhat depressed. Quotes on U.S. copper prices are as high as 84¢/pound (about 11¢ higher than last year), zinc is up to 40¢/pound (about 4¢ higher than February), and lead prices have fluctuated in recent months (in early March, lead sold for 22¢/pound).

At least some gold exploration activities in Wyoming's Archean greenstone belts and in the Black Hills region should continue in 1983. If the market recovers, silver exploration may occur in the Overthrust Belt of Wyoming. Any exploration for base metals will probably occur in the Sierra Madre range and the Hartville Uplift. Massive sulfide deposits have been reported in both of these regions (massive sulfide deposits generally contain varying concentrations of copper, zinc, lead, and trace gold and silver) (Hausel, 1982b). It is unlikely that the Absarokas will receive much attention because most of the porphyry copper-molybdenum deposits lie within wilderness areas (these deposits not only contain significant amounts of copper and molybdenum, but also sizable resources of zinc, lead, silver, gold, and presumably titanium).

During the first quarter of 1983, mining activities at U.S. Steel's Atlantic City iron ore mine near South Pass were suspended because of a malfunction in the mill's primary crusher. More than 400 employees have been temporarily laid off until the crusher is repaired. Mine officials don't expect a lengthy closure.

Continued diamond exploration is expected in Colorado and Wyoming. The Geological Survey of Wyoming announced that their joint venture with the Remote Sensing Group of the University of Wyoming's Department of Geology and Geophysics, would continue for at least another year. The two groups are investigating the application of remote sensing techniques to exploration for diamond-bearing kimberlite. Funding for the venture is provided by a NASA grant.

Early this year, the Geological Survey of Wyoming extracted two micro-diamonds (less than 1mm in diameter) from less than 25 pounds of kimberlite collected from the Sloan 5 (Evelyn) pipe in the Colorado-Wyoming State Line District. With this discovery, there are now thirteen known diamond-bearing kimberlites in the district.

Sources: Hausel, W.D., 1982a, Ore deposits of Wyoming: Geological Survey of Wyoming Preliminary Report 19, 39 p.

Hausel, W.D., 1982b, General geologic setting and mineralization of the porphyry copper deposits, Absaroka volcanic plateau, Wyoming: Wyoming Geological Association 33rd Annual Field Conference Guidebook, pp. 297-313; Geological Survey of Wyoming Reprint 40, 17 p.

Spring Agricultural Outlook

by Robert D. Carver
University of Wyoming

Projecting the agricultural outlook as the economy moves into 1983 is much like standing in a cold March wind watching some early robins flying around. The robins must signify something better is coming, but the temperature feels like winter. However, there are some harbingers of better things to come. The most widely publicized of these changing patterns are the government's Payment in Kind (PIK) program for grains and the apparent halting of the growth in our nation's cow herd.

THE ECONOMY

It is important that agricultural producers continue to monitor the U.S. economy, because continued improvement of the general economy is the key to a strengthened agricultural sector. Chances are that the U.S. economy has passed the low point of the current recession. The latest information available indicates improvements in nearly all of the sensitive economic indicators. Unemployment, currently at 10.4 percent, will continue high throughout the remainder of 1983. However, seasonal declines should begin to lower this figure as we move into summer. Interest rates have dropped sharply and should remain lower than in recent years throughout 1983. Declining energy costs should help keep agricultural production costs from rising more than the projected 4-5 percent.

GRAINS

Following two record or near record years in corn and wheat production, coupled with weakening export demand, the government initiated the PIK program in an attempt to reduce our current burdensome supplies. Final sign-up dates occur after this writing, however, it appears that the program will have good acceptance among grain producers. The actual reduction in corn

and wheat supplies will not occur until the 1983-84 marketing year. Although grain prices have risen somewhat since announcement of the PIK program, continued increases above carrying charges are not likely until the size of the 1983 crop is known.

LIVESTOCK

The total inventory of all cattle and calves on farms and ranches this past January was estimated by USDA at 115.2 million head. This was down slightly from the 115.6 million head in 1982, and marked the first reduction in total numbers after a three year build up in the current cattle cycle. If this trend continues in 1983, it will signify the shortest U.S. cattle cycle in history. The 1982 calf crop was down 1 percent from 1981, and with fewer cows and heifers to calve in 1983 the stage is set for less beef production during the next couple of years.

The PIK grain program has helped strengthen the feeder calf market this spring, as grain farmers purchased lightweight calves to graze grain fields that will not be harvested. This creates the potential for a drop in feeder cattle prices in June or early July as these cattle are moved to market. Feeder cattle prices could rebound somewhat by fall if the general economy continues to strengthen into the latter half of 1983, keeping fed cattle prices at positive levels.

Feeder cattle prices this fall should show some improvement over 1983 levels. Steer calf prices should be 4-6¢/pound above year ago levels, bringing \$72-\$76/cwt. Yearling cattle moving off grass this fall should bring \$67-\$69/cwt.

The inventory of sheep and lambs in the U.S. dropped 8 percent to 11.9 million head, the lowest sheep and lamb inventory on record. Sheep and lamb prices have shown some strength this spring, bringing \$5-\$6/cwt. over year ago levels. Lower anticipated supplies this fall should keep prices stronger than year-ago levels. Wool prices have been dismal so far in 1983, with little hope for improvement. The world carryin was 377 million pounds, the highest figure in the last five years, and 41 percent higher than last year.

The upshot of the current agricultural outlook as we move in to the spring of 1983 is cautious optimism. Both the supply and demand figures needed for stronger prices for the coming year are improved over 1982 levels. Large increases in prices received for agricultural products are not in the cards, however, some strengthening in most product areas is highly likely.

Job Openings Outlook

by Karen Scott, Wyoming Career Information System

The current recession has created a demand for upholsterers in Wyoming. In the past, established upholsterers saw little need to train inexperienced people. Business was steady and stable and they were able to handle the demand for their services. However, today's economy is different and many consumers are re-upholstering old furniture and cars rather than purchasing new items. The demand for upholstering has increased in Wyoming even though nationally the upholster business is declining. Established upholsterers are now willing to hire inexperienced people, preferring individuals who possess an eye for detail, have good color sense, mechanical ability and a flair for creative work.

Insurance claim adjusters and examiners are in demand in Wyoming. This favorable outlook is due to high turnover and the continued growth of both the insurance industry and the population in general. The overall demand for insurance is increasing as homeowners and business generally consider insurance a necessary expense. In addition because most employers are legally required to provide compensation insurance of their employees and automobile owners must have insurance protection, the industry should continue to expand. Although some areas of the insurance business are changing as a result of automation, the personal and detailed nature of much of the work will continue to require people in claims work. Specialized fields such as product liability and workers' compensation which are becoming increasingly complex should provide excellent opportunities for those wishing to pursue a career in these areas.

Approximately 145 resident claim adjusters and examiners are licensed in Wyoming. About 160 nonresident adjusters and examiners are licensed to work in Wyoming.

A growing number of insurance companies prefer applicants to have a college degree although no specific field is recommended by most employers. Some companies will hire individuals with experience or training in specialized areas such as parts body repair.

Additional information about these careers and their educational opportunities and about other occupational and educational information is available through the Wyoming Career Information System.

COUNTY
PROFILES.

Goshen County Profile

by Ruth Tebbutt

PHYSICAL CHARACTERISTICS AND CLIMATE

Goshen County is located in southeastern Wyoming, within the boundaries of the North Platte Valley. The county is bordered on the north by Niobrara County, on the south by Laramie County, on the west by Platte County, and on the east by the State of Nebraska (Map 1). Within the county's rectangular boundary there exist five incorporated communities: Torrington (the county seat), Lingle, Fort Laramie, La Grange, and Yoder, and the four unincorporated towns of Hawk Springs, Veteran, Huntley, and Jay Em. Goshen's land area ranks as the tenth largest in the State, being approximately 72 miles long and 31 miles wide, and containing 2,228 square miles, or 1,430,400 acres.

The topography in the area is flat and rolling prairie with a few "erosion buttes" rising above the valley floor of the North Platte River. Elevations in the county range from 4,615 feet at the northern boundary to 4,165 feet at the southern boundary. The valley of the North Platte River, which traverses Goshen in a southeasterly direction, is several hundred feet lower than the surrounding upland. This valley begins to widen in the northwestern region of the county near Fort Laramie and extends deep into Nebraska. Near the Nebraska-Wyoming state line it reaches a width of approximately 50 miles. Torrington which is located on the North Platte within this area, is at an elevation of 4,104 feet. Some buttes and mesas are found within this flat-bottomed valley.

Climatic conditions are semi-arid with monthly average temperatures ranging from 16.6 degrees in January to 71.3 degrees in July and contributing to a mean annual temperature of 48 degrees. The average annual rainfall is 14 inches, while the snowfall rates usually remain below 30 inches during a typical year.

HISTORY

Goshen County comprises one of the richest historical areas in the State of Wyoming. Currently, the county has four areas that are listed on the National Register of Historic Places. These historical areas are Fort Laramie, Fort Laramie Three Mile Hog Ranch, Rawhide Buttes' Station, and South Torrington Union Pacific Depot. Other areas that have strong historical significance are the 1875 Iron Army Bridge and the Gratten Massacre Monument. The following narrative provides a brief description of the historical development of Goshen County and focuses on these historic sites.

What is now Goshen County was part of the land claimed by Spain under the grant of the Pope in 1493. Then, based on the expedition of La Salle, who gave the territory the name of Louisiana, the land came under the rule of France. This province was then ceded by France to Spain in 1762; ceded back to France in 1800 and sold to the United States in 1803 as part of the Louisiana Purchase. During this period, the land was inhabited by Pawnee Indians who grew crops in the fertile valley and hunted the abundant wildlife on the uplands. The Pawnees were later driven out by nomadic tribes of the Sioux Indians, and later still, trappers and traders took over this strategic location.

In addition to providing ideal hunting and farming ground, the valley of the north Platte in Goshen was a natural crossroad to the "Western Frontier." The County was traversed by the Oregon, Mormon, and California trails, the Overland Stage, Pony Express, and overland telegraph lines. With the North Platte River as their guide, the first sizeable group of emigrants crossed into the territory of Wyoming in 1843. For two decades the county served as the door to the West for some 350,000 pioneers who crossed the Oregon Trail.

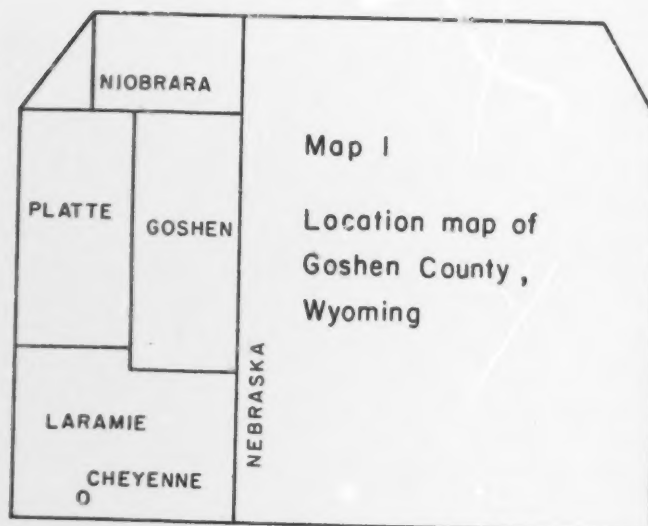


Figure 1a: Goshen County On-Line Data Base

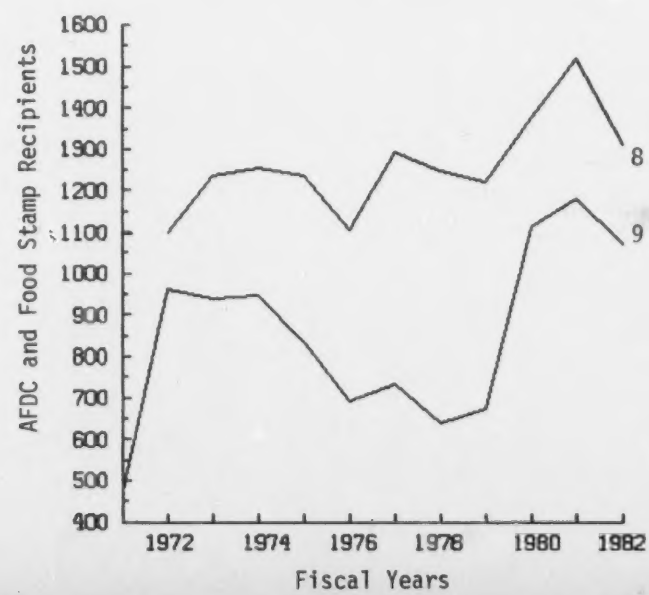
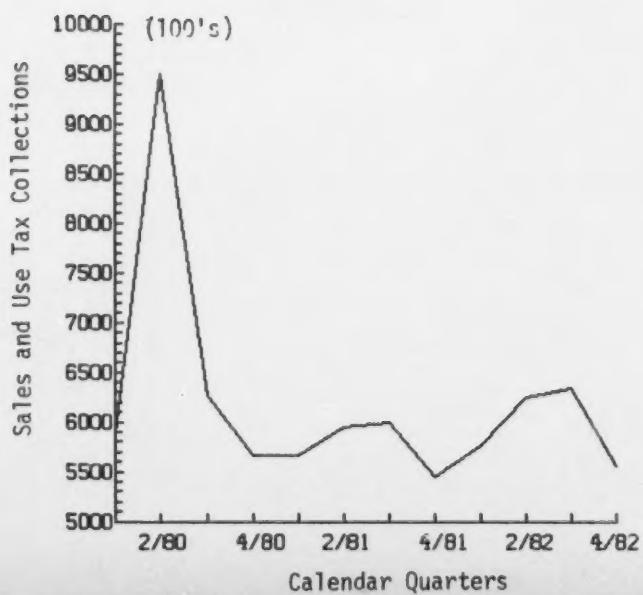
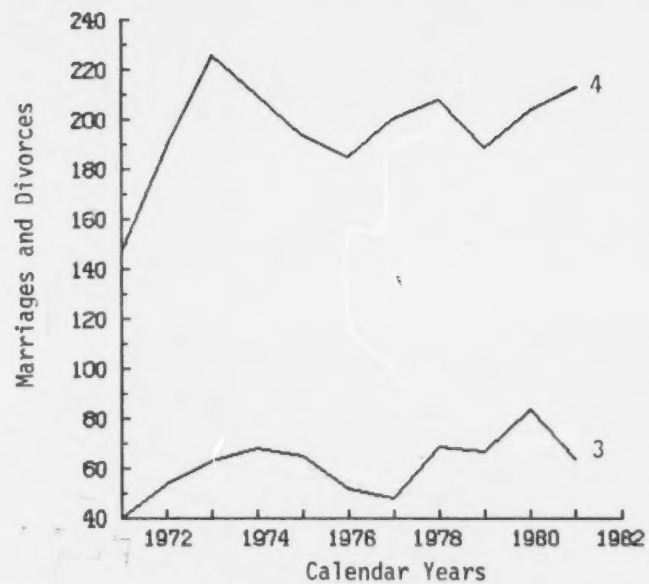
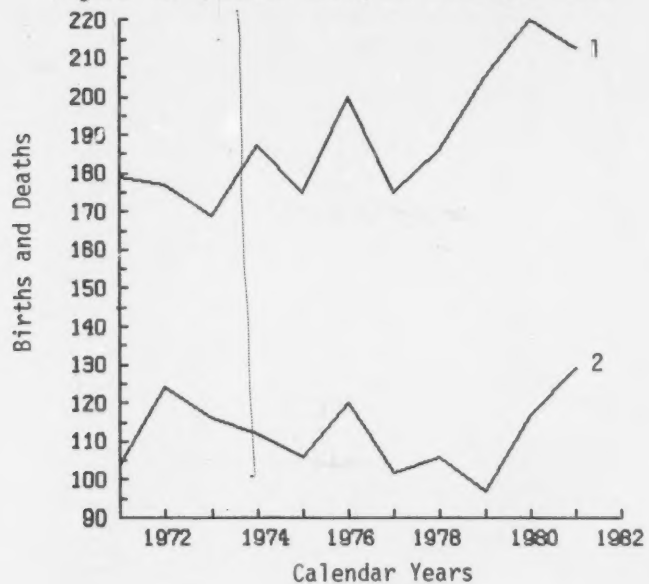


Figure 1b: Goshen County On-Line Data Base

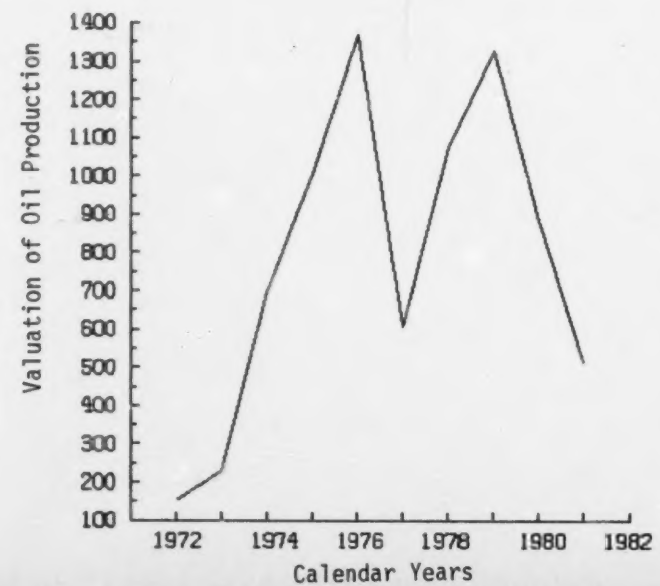
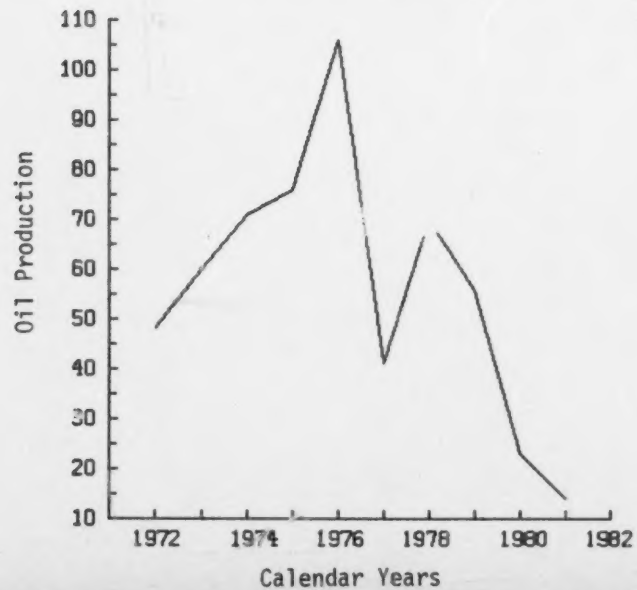
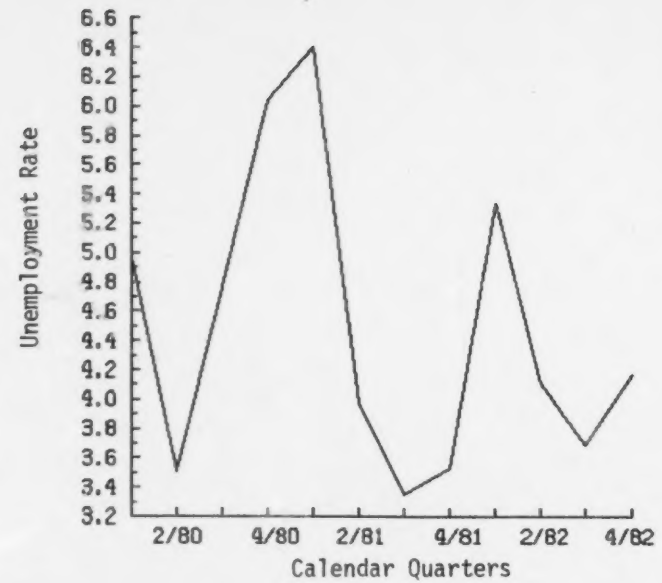
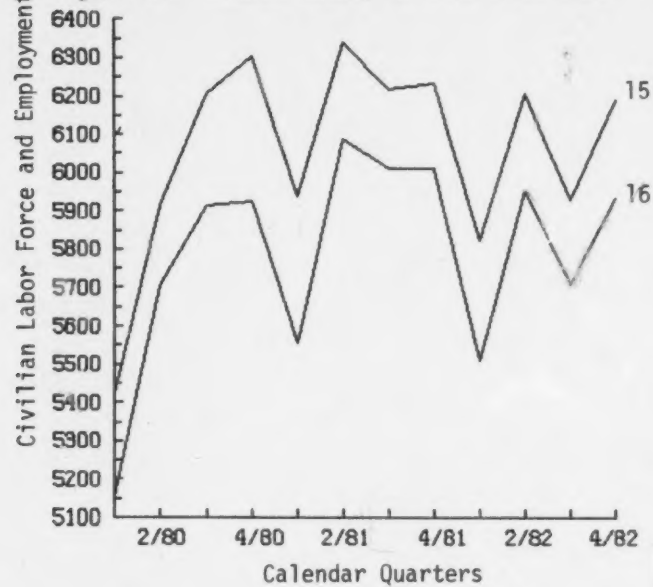


Table 1: Goshen County Profile

Calendar Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1. Births	179.	177.	169.	187.	175.	200.	175.	186.	205.	220.	213. ¹	INA
2. Deaths	104.	124.	116.	112.	106.	120.	102.	106.	97.	117.	129. ¹	INA
3. Divorces	40.	54.	63.	68.	65.	52.	48.	69.	67.	84.	64. ¹	INA
4. Marriages ²	147.	189.	226.	210.	194.	185.	201.	208.	189.	204.	213. ¹	INA
5. Population	11100.	11100.	11300.	11400.	11700.	12200.	12100.	11900.	11600.	12040.	12124.	12210.
6. Oil Production (HBBL)	INA	48.	60.	71.	76.	106.	41.	70.	56.	23.	14.	INA
7. Valuation of Oil Production (H\$)	INA	151.	229.	697.	1004.	1367.	605.	1076.	1326.	885.	515.	INA
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
8. AFDC Grants	INA	1095.	1236.	1253.	1237.	1106.	1290.	1248.	1220.	1375.	1517.	1309.
9. Food Stamp Recipients	474.	962.	940.	948.	834.	692.	731.	640.	671.	1111.	1179.	1071.
10. AFDC Payments (\$)	INA	139288.	175633.	188125.	184041.	190933.	250943.	241861.	266067.	331253.	395147.	389140.
Calendar Quarters	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82
11. Hotel, Motel, & Camp Sales & Use Tax (\$)	10978.	9846.	15048.	7670.	8330.	10806.	12110.	9297.	9143.	10368.	12436.	9464.
12. Net Collection Sales & Use Tax (\$)	586850.	950495.	625937.	566120.	566865.	594699.	599514.	544896.	575788.	624275.	634492.	555360.
13. Liquor Sales (\$)	100869.	110211.	111413.	179842.	92923.	121763.	126555.	167458.	102051.	126277.	111718.	164924. ³
14. Gasoline Gallonage (TGL)	1612909.	2150794.	2239999.	1966435.	1683832.	2161847.	2173563.	2065195.	1718034.	2059895.	2276701.	1971800.
15. Civilian Labor Force	5423.	5915.	6207.	6305.	5937.	6338.	6219.	6233.	5823.	6208.	5931.	6190.
16. Employment	5154.	5707.	5912.	5924.	5557.	6086.	6011.	6013.	5512.	5952.	5712.	5932.
17. Unemployment	269.	208.	296.	381.	380.	252.	208.	220.	311.	256.	219.	258.
18. Unemployment Rate	5.0	3.5	4.8	6.0	6.4	4.0	3.3	3.5	5.3	4.1	3.7	4.2

¹Provisional data from the Wyoming Department of Public Health, Division of Vital Statistics.

²1971 through 1979 are estimates made by the U.S. Bureau of the Census, not an actual count as in 1980. 1981 and 1982 are estimates made by the Department of Administration and Fiscal Control.

³Estimate based on trend and October and November data.

Much of the subsequent history of Goshen County centers around Fort Laramie, considered to be the first permanent settlement in Wyoming. Located at the junction of the Laramie and North Platte Rivers, Fort Laramie was initially established as Fort William by the fur traders, William Sublette and Robert Campbell. When the American Fur Company bought the post in 1836, Fort Laramie became one of the major trading centers in the Rockies. The fur trade declined and the fort was rebuilt and renamed Fort John in 1841. It retained its nickname--Fort Laramie (after trapper Jacques La Ramie)--and became a safehold for gold-seekers and weary travelers, a station for the Pony Express and the Overland Stage, and served as an important military post in the conquest of the Plains Indians. It witnessed the growth of the open range cattle industry, the coming of the homesteaders and final settlement in the 1890's, marking the closing of the frontier as well as the abandonment of the Fort.

For the next 50 years, Fort Laramie was allowed to go unattended. It was not until 1937 that Wyoming appropriated funds for the purchase and donation of the Fort to the Federal Government. In 1938, the 214 acres of former military reservation land was proclaimed a National Historic Site by President Franklin D. Roosevelt and joined the National Park System. The now 572 acre site (1960) stimulates tourism in the county, attracting visitors eager to view Old Bedlam, the oldest standing permanent military building in Wyoming, as well as the other 21 original structures.

More of Goshen County's history can be found in the old Iron Army Bridge, located two miles above Fort Laramie spanning the North Platte. In 1874, mostly in response to Cheyenne's competition with other Union Pacific towns of Sidney and North Platte, Nebraska for freight outfitting, Congress was lead to appropriate \$15,000 for construction of a government military bridge across the North Platte at or near Fort Laramie. It was completed in 1875. The bridge influenced routes of commerce and travel and facilitated the operation of the Cheyenne-to-Deadwood stagecoach line. It also opened traffic to the Black Hills and aided army expeditions for the final Indian crusades.

The bridge continued to be used until 1958 when a new bridge was built a short distance upstream from it. As one of the first iron bridges to be built west of the Missouri, the original structure is still in place and is being preserved by the National Park Service. In 1977, the old bridge was dedicated as a Wyoming Historic Engineering Landmark.

Just east of the old Iron Army Bridge is the Three Mile Hog Ranch which was one of the first ranches to be homesteaded in the vicinity of Fort Laramie. Also in the proximity of Fort Laramie, a half mile southwest of Lingle, stands the Grattan Massacre Monument. It was at this site where Lieutenant John L. Grattan and a detail of 39 men were killed by Sioux Indians while attempting to arrest an Indian for killing a piece of livestock belonging to a group of travelling Mormons.

Although the early history of the County centers around Fort Laramie, other events have had a strong influence on the County's historical background. For instance, Goshen County was created by the state legislature of 1911 out of part of Laramie County. The origin of the name Goshen is still under argument. At the time when Fort Laramie was settled, there was a Coche's Hole which later was turned into the spelling of Goshen Hole. There are others that contend the name was selected from the Bible story about the "Land of Goshen."

Furthermore, the oldest existing town in the County, which was incorporated in 1889, is La Grange. The communities of Torrington, Lingle, and Huntley developed rapidly after World War I in conjunction with expanded irrigation practices. Growth of Hawk Springs, Yoder, and Veteran was highly dependent on the building of the Union Pacific Railroad that connected these communities with Torrington and Cheyenne. The South Torrington Union Pacific Depot located across from the Holly Sugar Plant, was one of the first railroad depots constructed in the County.

NATURAL RESOURCES

Minerals

Records show that there was considerable prospecting in the early days of the county, but Goshen does not contain an abundance of known mineable resources. According to the Mineral Division of the State Department of Economic Planning and Development, oil, sand, and gravel are the only mineral resources extracted in the County. Production is from two small fields about four miles south of Torrington (1955). Table 1 shows that in 1981, 1,400 barrels (1,431 barrels without rounding error) were produced, representing a decline of over 1,000 barrels from 1980. It is predicted that Goshen County will produce a small amount of oil for some years, but that the quantity will fluctuate.

Because most of the wells in Goshen County have a low production capability, they are classified as "stripper wells" and the price of their oil is not controlled by the Federal Government. As a result, Goshen County oil has had, and continues to have, the highest valuation

per barrel in the state at \$35.99. In spite of the value of the oil, Goshen County has the second lowest total mineral valuation in the state (Teton County has the lowest).

Other mineral occurrences reported in Goshen County include: coal (primarily located in the south central portion of the County in a large land area known as the Goshen Hole Coal Field), limestone, silver, copper, gold, and iron (all of which are found in the Hartville Uplift along with other minerals). Of the above mineral resources found in the County, coal, limestone, and iron ore are identified as having future development potential. However, in the near future, mineral extraction will most likely continue to be only a small generator of income and employment in Goshen County. More geological research needs to be undertaken to determine the actual location, quantity, and quality of minerals that are available.

Land

Goshen County has an area of 1,430,400 acres, of which 4,420 acres are covered by water. Private individuals own 1,294,000 acres or 90.8 percent of the land. The State of Wyoming owns 102,830 acres (7.2 percent) and the Federal Government owns the remaining 28,870 acres (2 percent).

A portion of the State owned land is leased to private citizens for grazing purposes for ten year terms. The Bureau of Land Management owns 26,737 acres, the majority of the Federal Government's land. The national Parks Service owns 579 acres at the Fort Laramie National Historic Site, while the United States Bureau of Reclamation owns the remaining 1,555 acres. The Bureau of Reclamation also owns an additional large amount of land, namely the water-covered part of the county.

Water

Goshen County's economic livelihood centers on it's abundance of surface and ground water resources. In fact, the County has the largest amount of irrigated crop-land in the State due to a well developed and maintained system of rivers, tributaries, reservoirs, canals, and ground water. These water resources are the key to the County's large scale agricultural productivity while at the same time providing a variety of recreational activities including those related to abundant fish and wildlife. A series of reservoirs located west of Goshen County (Guernsey, Glendo, and Pathfinder Reservoirs) further provide water for irrigation, hydroelectric power, and flood and sediment control.

Surface Water

The North Platte River is the major river in Goshen County, traversing the center of the County and flowing in a west-east direction. Various project authorizing acts along with the Federal Reclamation Act (1902) enabled the Bureau of Reclamation to harness the power of this County's most valuable natural resource for the purpose of providing irrigation water and power production. The first delivered irrigation services were made in Goshen County in 1908. Today, before the Platte River enters the county it is stored in the Guernsey Reservoir, located in Platte County seven miles west of the county line. The flow of the River through Goshen is controlled by the Guernsey Dam.

The Laramie River and the Whalen Diversion Dam also contribute to the County's surface water supply. A major tributary of the North Platte River, the Laramie River, enters Goshen County approximately seven miles south-east of Fort Laramie. Ten miles below the Guernsey Reservoir in the western region of Goshen is the Whalen Diversion Dam. The Dam diverts water into the County's two major canals: the Interstate and Fort Laramie, delivering irrigation water to the lands of Goshen County.

Ground Water

Goshen County has one of the largest supplies of ground water in the State. Ground water is readily available for domestic, stock, municipal, industrial, and irrigation uses in the County in the "terrace areas" along the North Platte River, in the upland areas drained by Rawhide Creek, and in the Goshen Hole area.

THE PEOPLE

The most recent population figure available from the Census Bureau shows a 1980 population of 12,040 for Goshen County. This 10.61 percent growth over 1970, which represents a 1.06 percent average annual growth, reverses the declining population trends between 1950 and 1970. Between 1950 and 1960 the County's population declined by 693 persons. A similar declining trend but at a larger rate was recorded between 1960 and 1970. During this ten year period the County lost 1,056 residents.

Looking at Figure 2, one sees that the population increase between 1970 and 1980 did not have a significant affect on either the proportion of males to females nor the age distribution in Goshen County. According to the bar graphs, the ratio of males to females living in Goshen has remained approximately equal from 1970 to 1980. The median age of the County displays a mere 1 percent change from 31.8 years of age in 1970 to 31.4 in 1980. A change has occurred within the age groups, however. In 1970, the highest percentage of the population occurred in the 5-14 age group. The 1980 Census shows that the age group 15-24 contains the highest percentage of the population (17.61 percent). Assuming that there is no major influx into the County, this aging trend should continue. It should also be noted that the County contains a large number of elderly citizens, with 24.67 percent over the age of 55. The large percentage of persons 55 and over is clearly depicted when it is realized that the State as a whole only contains 15.27 percent in the same age category.

An estimated 84 persons were added to Goshen County's population during 1981 as a result of natural increase; the excess of births over deaths. The number of births grew 18.99 percent, a higher percentage than the population growth, from 1972 to 1981. The number of deaths remained fairly constant over the same time period, with a 10.26 percent increase between 1980 and 1981. Marriages and divorces show no outstanding pattern during the years presented in Table 1 (also refer to Figure 1a). Marriages rose 4.41 percent in 1981 over 1980. A 23.31 percent decrease in divorces occurred from 1980 to 1981.

Food stamp and AFDC recipients increased 11.33 percent and 19.54 percent, respectively, from 1972 to 1982, both more rapidly than the estimated 1972-1982 population growth rate of 10.00 percent. The combined effect of inflation and added recipients increased AFDC payments by 179.38 percent from 1972 to 1982.

ECONOMY

Employment statistics are usually excellent indicators of the economic health of any given area. Table 1, along with Figure 1b, illustrates labor force and unemployment trends in Goshen County from the first quarter of 1980 (1/80) to 4/82. Table 1 shows the total labor force declining by 115 persons between 4/80 and 4/82. This mere 1.82 decrease indicates stability. The small decline was also accompanied by a 32.28 percent decrease in the number of unemployed persons which combined with a slight increase in employment led to a 1.8 percentage point decrease in the County's unemployment rate. The above figures are an indication that Goshen County has experienced a degree of economic prosperity from 4/80 to 4/82.

According to Table 2, the largest single source of personal income in Goshen County in 1980 was agriculture, supplying 22.47 percent of the County's total personal income.

Table 2: Personal Income by Major Source (Thousands of Dollars)*

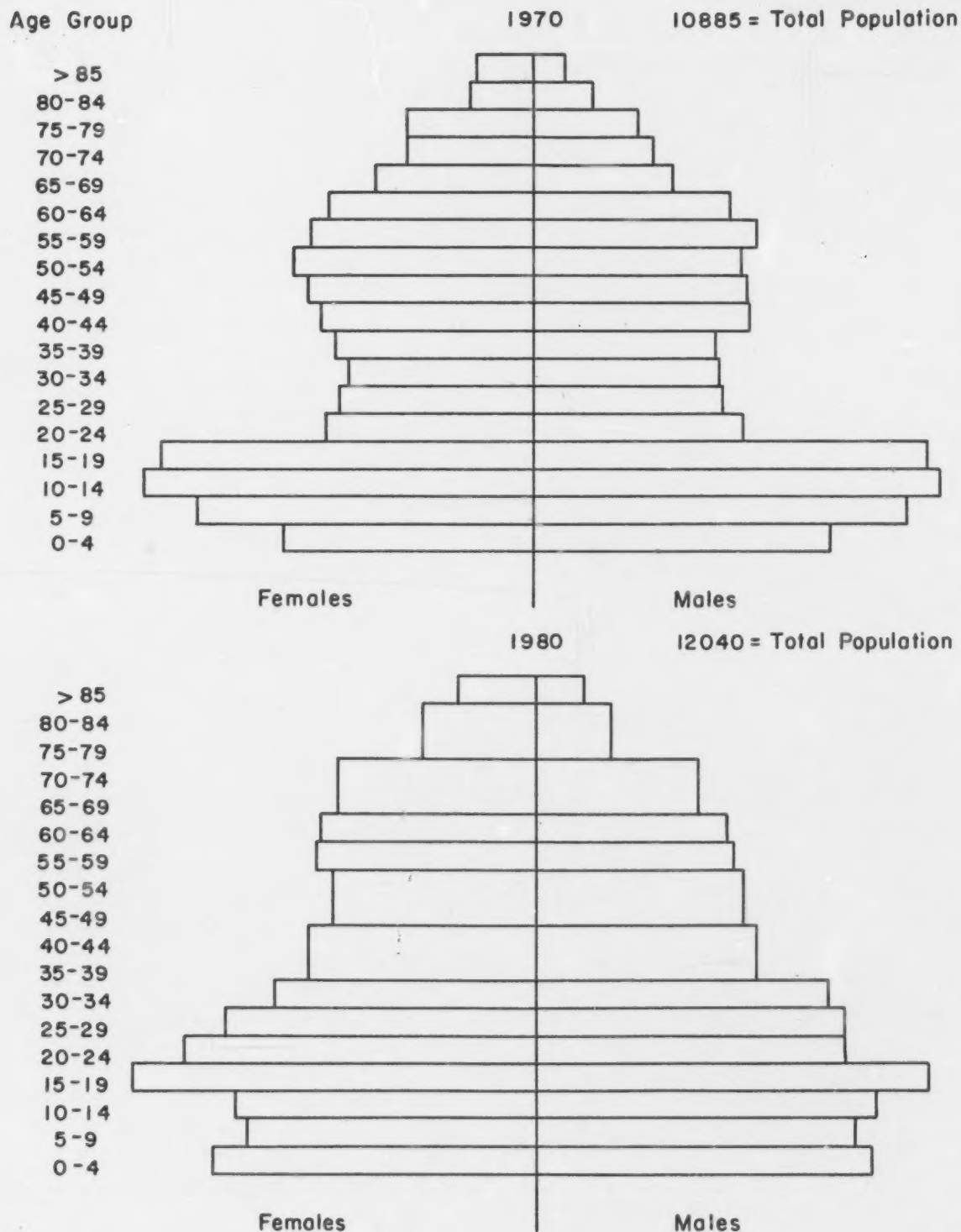
Source	Wyoming 1980		Goshen County 1980		Goshen County 1970	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	99980	2.46	14249	22.47	9576	35.81
Ag Serv., For., Fish, and Other	13143	.32	D#	---	444	1.66
Mining	1015626	24.99	D#	---	137	.51
Construction	464577	11.43	4640	7.32	698	2.61
Manufacturing	196636	4.84	4502	7.10	1861	6.96
Transportation & Public Utilities	415770	10.23	4950	7.80	1695	6.34
Wholesale Trade	193476	4.76	4059	6.40	713	2.67
Retail Trade	382244	9.41	7780	12.27	3335	12.47
Finance, Insurance & Real Estate	137457	3.38	1995	3.15	870	3.25
Service	458014	11.27	7488	11.81	2357	8.81
Government	687257	16.91	12387	19.53	5056	18.91
Total	4064180		63422		26742	

* REIS Data

Not shown to avoid disclosure of confidential information; data are included in totals.

Although this percentage represents a decrease from the 35.81 percent of total recorded in 1970, agriculture's importance to the County's economy is not dwindling. Agriculture plays, as it has historically, a vital role in the economy of Goshen. According to the Wyoming Crop and Livestock Reporting Service, the County led all Wyoming counties in production of the top four of ten agricultural categories during 1981. The county topped the ranking in production of cattle, dry beans, sugar beets, and corn for grain. Furthermore, Goshen was second in winter wheat production, fourth in milk cows, and fifth in hay.

Figure 2 : Goshen County ; Age by Sex in 5 Year Age Groups , 1970 , 1980



Another contributor to the strong agricultural economy of the Goshen County area is the Holly Sugar Corporation's Torrington factory (since the mid-1920s). The impact is clear with its annual payroll of \$2.5 million combined with sugar beet payments totaling approximately \$20 million for the 1981-1982 beet campaign (the Torrington Telegram; March 6, 1982). Holly directly disburses its \$2.5 million payroll to about 120 to 125 full time employees and a seasonal peak of 350 workers at the plant. As for farmers, in March, 1982 there were about 300 growers under contract with Holly. All of these growers are within a 60 mile radius of the plant and farm in Goshen, Laramie, and Platte Counties of Wyoming, and Scotts Bluff and Sioux Counties in Nebraska.

Government and retail trade maintained their positions as the second and third ranking sources, respectively, of total personal income in the County from 1970 to 1980. Government generated a slight 3.28 percent (not percentage point) more of the County's total personal income in 1980 over 1970. Retail trade, tied closely to what happens to the farmer and rancher in Goshen County, accounted for 1.60 percent (not percentage point) less of the total income figure in 1980, compared to 1970.

It should also be mentioned that Fort Laramie, along with the other historic sites in Goshen (see History), is still another asset to Goshen County's economy. Fort Laramie stimulates tourism in the County as is reflected by the fact that the area received 90,196 visitors in 1980; 121,289 in 1981; and 95,271 in 1982.

OUTLOOK

Goshen County has seen considerable growth since it was created in 1911 and there is every indication that it will continue to grow and prosper.

A promising future particularly exists for expanding the County's agricultural based economy. This can be said in light of the fact that additional quantities of surface and ground water supplies are available for use. Presently under consideration is the Horse Creek Conservation District Water Project bill. Horse Creek is comprised of three private water districts that provide irrigation water to farmers and ranchers. The bill provides a \$4.5 million grant and a \$1.9 million loan to rehabilitate the water delivery system for 65 farmers in southern Goshen County (the Torrington Telegram; February 23, 1983).

The importance of Fort Laramie to Goshen and to the State is likely to continue to grow in the future. The National Park Service has recently restored additional buildings, constructed an additional visitors' center-administration building, and installed new maintenance facilities. The town of Fort Laramie is working hard to develop a park in the south part of town in to an area which will encourage tourists travelling by motor home or with a trailer to stay longer in the area.

Other recent developments having impact on the population and economy of Goshen County include:

1. Torrington attorney, Don Jones indicated that there will be an increase in drilling activity in the County over the next few years due to the fact that a high percentage of land in the County is now leased for oil exploration (the Torrington Telegram; March 6, 1982).
2. The Holly Corporation plans "massive updating" of the facilities at its Torrington factory, according to Holly Agriculturalist R.W. Fullmer (the Torrington Telegram; March 6, 1982).
3. Chicago and North Western Transportation and its subsidiary, Western Railroad Properties, are advancing plans to construct the Western Coal Line Project and its associated facilities in Converse, Niobrara, and Goshen Counties. The project represents the first time Chicago and North Western will be able to serve Wyoming's coal fields. Many new temporary, permanent, and induced employment opportunities will be created.

Sources:

Economic Blueprint Component of Public Investment Plan: Torrington, Wyoming. Prepared for State of Wyoming, Department of Economic Planning and Development by Wyoming Industrial Development Corporation (1975).

Fort Laramie: National Historic Site. Pamphlet prepared by the National Park Service, U.S. Department of Interior (1976).

Land Use Plan: Goshen County, Wyoming. Prepared for the Goshen Association of Governments by Oblinger-Smith Corporation (December, 1977).

Staff Review of the Permit Application for Chicago and North Western Transportation Company and Western Railroad Facilities in Converse, Niobrara, and Goshen Counties, Wyoming. State of Wyoming, Office of Industrial Siting Administration (June, 1982).

Torrington, Wyoming: 1982 Community Profile. Industrial Development Division of Department of Economic Planning and Development.
Wyoming Agricultural Statistics 1982. Wyoming Crop and Livestock Reporting Service. Annual Report.
Wyoming Association Municipalities News (January, 1983).
1981 Governor's Resource Management Tour: Platte and Goshen County. Wyoming Executive Department (June 17-19, 1981).
1982 Wyoming Mineral Yearbook. Mineral Division of Economic Planning and Development; Annual report.

Platte County Profile

by Ruth Tebbutt

PHYSICAL CHARACTERISTICS AND CLIMATE

Platte County, with Wheatland as the county seat, lies in the southeastern part of Wyoming. The County is bordered on the north by Converse and Niobrara Counties, on the east by Goshen County, on the south by Laramie County, and on the west by Albany and Converse Counties (Map 2). Basically rectangular in shape, Platte is 66 miles long and 33 miles wide. Topographically, the County ranges from semiprairie land on the east to the rolling foothills of the Laramie Mountain Range on the west. Elevation is low, varying from 4,200 to 5,500 feet. Major drainages in the area include the Laramie, North Laramie, and North Platte Rivers, and the Sybille, Chugwater, Cottonwood, Horseshoe, Elkhorn, Fish, and Richard Creeks.

Platte County can truly be considered the "Banana Belt" of Wyoming, even though the summer temperatures rarely exceed 100 degrees. The average annual temperature is 49.1 degrees--higher than any other county in the state. Monthly averages range from 28.9 degrees in January to 72.6 degrees in July. Spring and early summer mark the period of maximum precipitation in the County. In the

"Wheatland Flats" area, where the county's agricultural industry is centered, annual precipitation averages 12 to 14 inches during a normal year. Other areas vary: in the foothills and mountains on the western border, annual average precipitation ranges from 15 to 19 inches; on the southern plains, the average fluctuates between 15 and 17 inches; the northern plains see from 10 to 14 inches of annual precipitation. Temperature and precipitation conditions combine to allow for an average growing season of 133 days.

HISTORY

Platte County takes its name from the North Platte River. The origin of the name of the Platte River dates back to the time when French settlers occupied the valley of the river. The Frenchmen learned that Indians called the river the Nebraska, which in their language signified

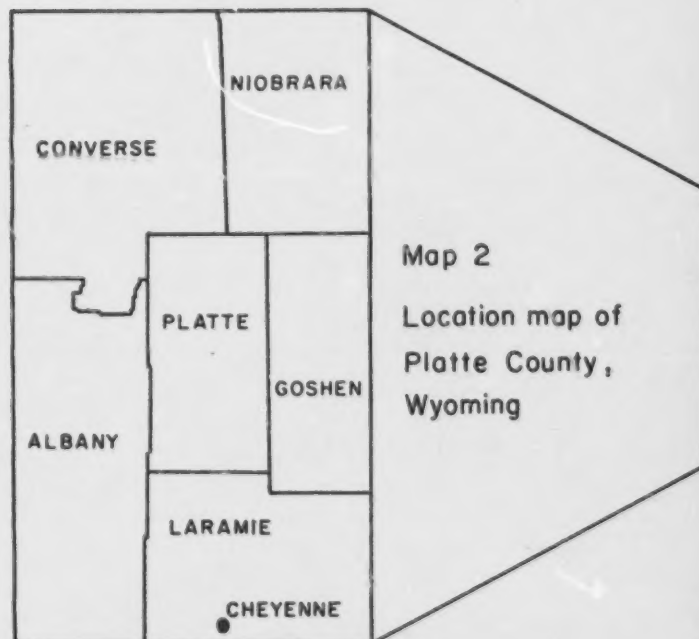


Figure 2a: Platte County On-Line Data Base

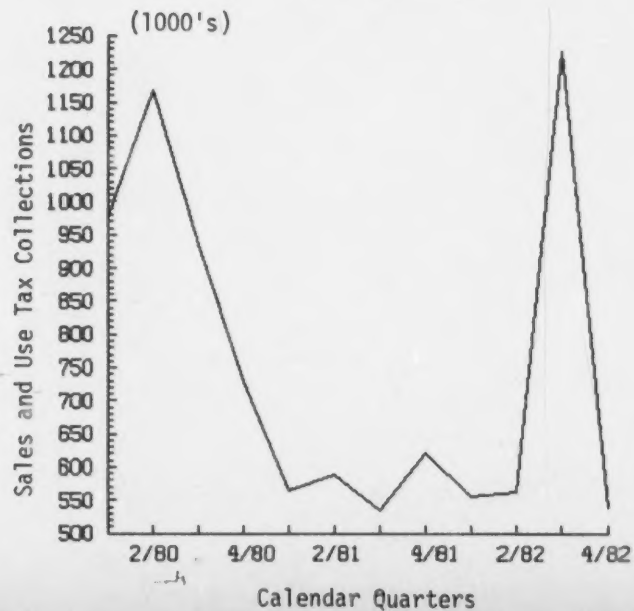
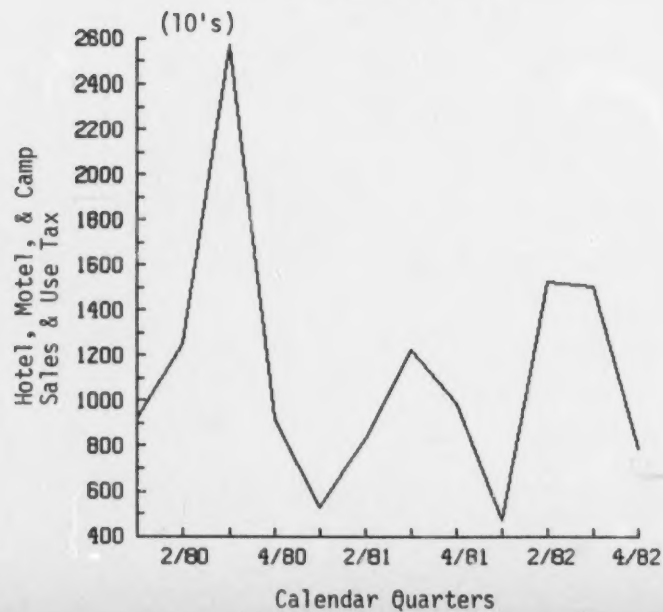
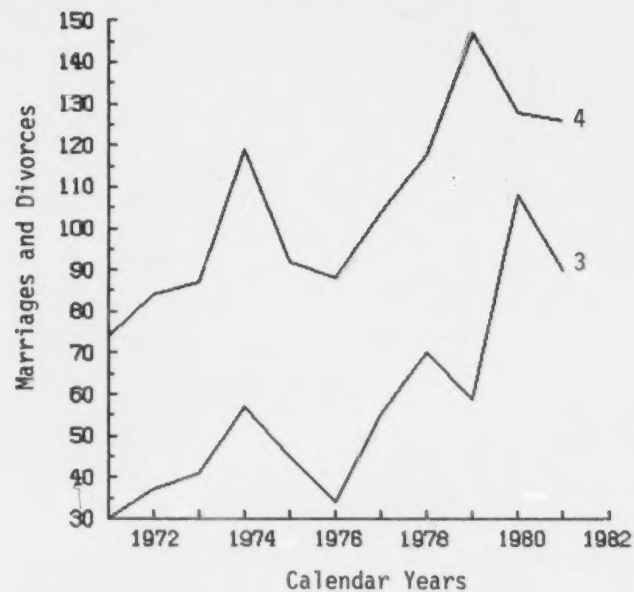
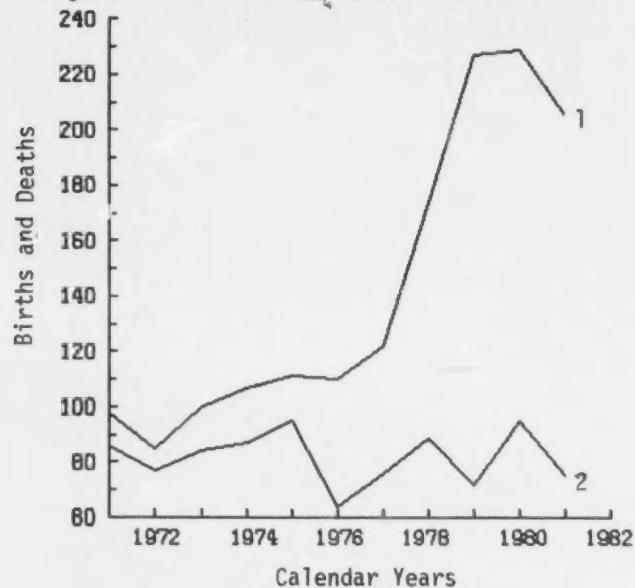


Figure 2b: Platte County On-Line Data Base

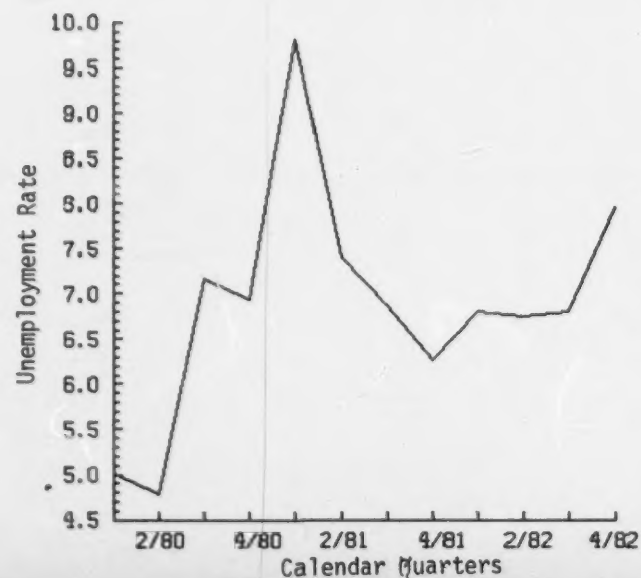
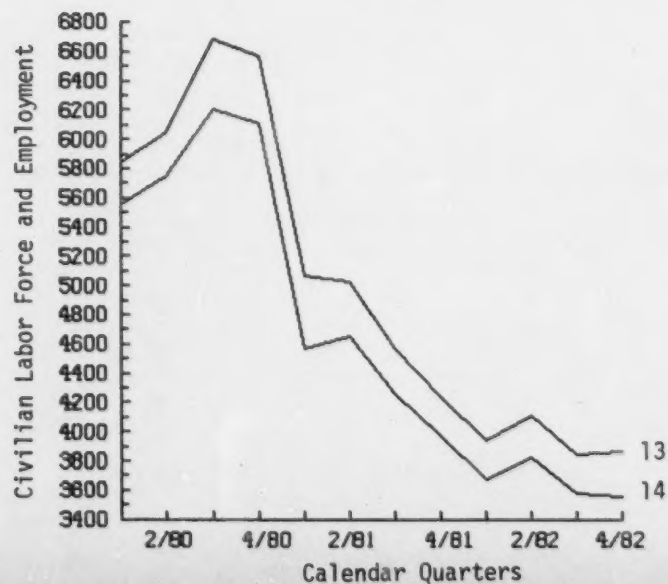
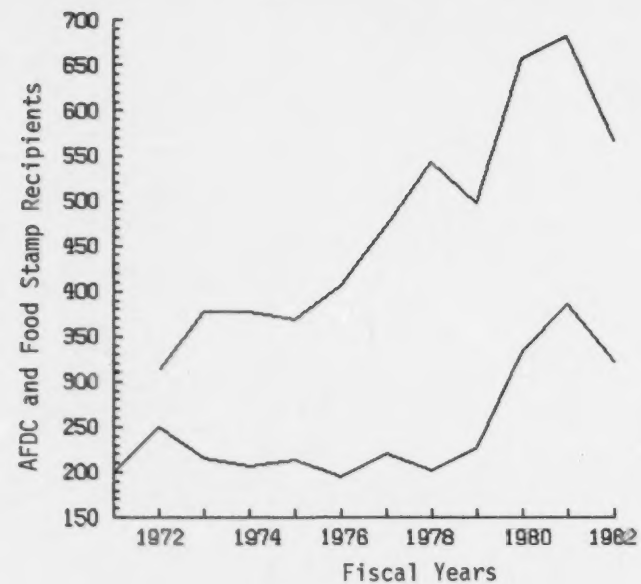
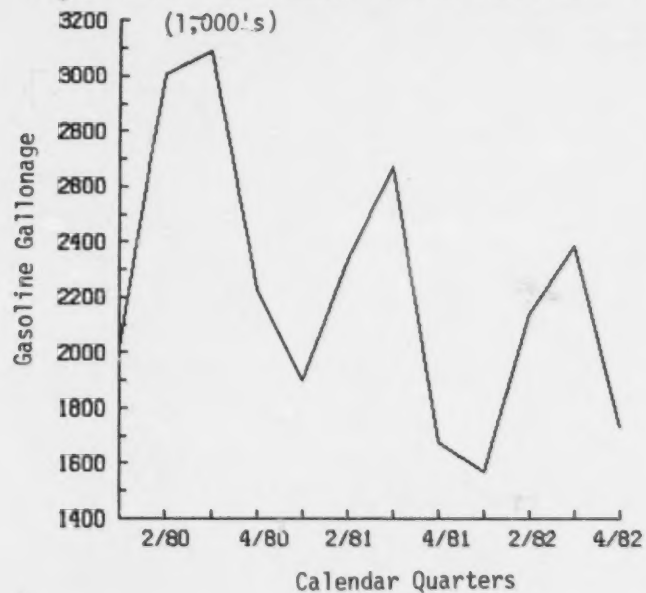


Table 2: Platte County Profile

Calendar Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1. Births	98.	85.	100.	197.	111.	110.	122.	174.	227.	229.	205. ¹	INA
2. Deaths	86.	77.	84.	87.	95.	64.	76.	89.	72.	95.	75. ¹	INA
3. Divorces	30.	37.	41.	57.	45.	34.	55.	70.	59.	108.	90. ¹	INA
4. Marriages ²	74.	84.	87.	119.	92.	88.	104.	118.	147.	128.	126. ¹	INA
5. Population ²	6700.	6600.	6800.	7000.	7200.	7700.	8200.	8900.	10400.	11975.	10191.	10123.
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
6. AFDC Grants	INA	311.	377.	378.	369.	406.	471.	542.	497.	657.	681.	566.
7. Food Stamp Recipients	200.	249.	215.	206.	213.	194.	221.	202.	228.	334.	385.	322.
8. AFDC Payments (\$)	INA	40834.	54800.	58369.	52834.	64876.	78083.	89171.	96985.	158311.	179932.	156903.
Calendar Quarters	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82
9. Hotel, Motel, & Camp Sales & Use Tax (\$)	9174.	12509.	25729.	9164.	5290.	8304.	12200.	9878.	4716.	15286.	15075.	7896.
10. Net Collection Sales & Use Tax (\$)	977749.	1167087.	934821.	729982.	564752.	587252.	534030.	622099.	555871.	561240.	1227100.	538167.
11. Liquor Sales (\$)	157585.	1849675.	178208.	213324.	129563.	147211.	135551.	160680.	106110.	132153.	110433.	126084. ³
12. Gasoline Gallonage (TGL)	2014262.	3010308.	3087946.	2226272.	1902234.	2333388.	2673385.	1675708.	1569209.	2136003.	2387462.	173500.
13. Civilian Labor Force	5843.	6041.	6685.	6562.	5065.	5019.	4568.	4236.	3942.	4103.	3841.	3867.
14. Employment	5551.	5751.	6206.	6108.	4569.	4648.	4252.	3970.	3673.	3826.	3580.	3559.
15. Unemployment	292.	289.	479.	455.	497.	371.	314.	265.	269.	277.	261.	308.
16. Unemployment Rate	5.0	4.8	7.2	6.9	9.8	7.4	6.9	6.3	6.8	6.8	6.8	8.0

¹Provisional data from the Wyoming Department of Public Health, Division of Vital Statistics.²1971 through 1979 are estimates made by the U.S. Bureau of the Census, not an actual count as in 1980. 1981 and 1982 are estimates made by the Department of Administration and Fiscal Control.³Estimate based on trend and October and November data.

"flat." Interpreted into French, it became the La Platte River, maintaining the idea of a broad shallow stream. Ordinary usage has made it the Platte River.

The land of which Platte County is a part came into the possession of the United States through the Louisiana Purchase. After innumerable territorial boundary and name changes, a final change took place in 1869 creating Wyoming Territory with the boundaries which form the present state lines. From 1867 throughout the organization of Wyoming Territory, the area of Platte County was under the authority of Laramie County. On February 9, 1911, the Eleventh Wyoming State Legislative Assembly passed an act creating Platte County.

Evidence of prehistoric hunters, who may have lived in the area of Platte County as long as 8,000 to 10,000 years ago, is supplied by the existence of prehistoric quarries known as the "Spanish Diggings" found in the northeastern corner of the County. Besides these original aborigines, the first people of whom there is written history are the "Plains Indians." The first permanent settlers were the proto-Pawnees. When the first white explorers entered the North Platte Valley, it was occupied by the Pawnee Indians. Subsequent occupation was made by nomadic tribes of the Sioux who drove out the Pawnees.

The fur trade brought the first white men into Platte County. One of the first known records of white men is of a party of seven men, under the leadership of Richard Stuart, who were following the course of the North Platte River on their return from a trading post in Oregon (1812). This route soon came to be the recognized highway for fur traders.

Following the fur traders came the immigrants looking for homes in Oregon and in the Salt Lake Valley, and those bound to seek gold in California and Montana. Platte County history during the early 1800s centers on the passages of immigrants; only the "hardy" pioneers settled in the area. When passing through what is now Platte County, travelers did not recognize the potential of the rich bottom soil along the floors of the Valley. Instead, they saw the contrast between their places of origin and the vast spaces of brown ground inhabited only by herds of buffalo and bands of antelope. Prior to the Spring of 1867 there were less than ten inhabitants within the County.

It was the range cattlemen who started permanent settlement in the County. The cattle business began as a result of the needs of the immigrants along the westward trails. "Cattle Kings," such as the Swan Land and Cattle Company, became established as the cattle industry boomed between 1870 and 1880. The center of operation was along Chugwater and Sybille Creeks and Laramie and North Laramie Rivers.

Decline of the "big cattle era" began with the hard winter of 1886-87. Furthermore, homesteaders were making claims along the waterways, which had been providing water to the rangelands. Soon the open range was occupied by dryland farmers.

Irrigation was first introduced in Platte County in 1883; marking the beginning of the irrigated farming period which until recently dominated the economy of the County. The first large irrigation project in Platte was started by the Wyoming Development Company on May 17, 1883; progress on its development was slowed until the passage of the Carey Act in 1894, which made the secured water rights permanent.

The town of Wheatland owes its existence to the organization of the Wheatland Colony, the name given to the irrigated farms developed by the Wyoming Development Company between 1883 and 1893. It was not until 1893 that the actual construction of the town began. Wheatland was incorporated in 1905, and in 1911 became the county seat of Platte County.

The remainder of the County's towns "boomed" in the same manner as Wheatland. Guernsey, Hartville, and Sunrise owe their origin primarily to the discovery of copper and iron ore deposits around the turn of the century. Glendon and Dwyer grew as the homes of dryland farmers. Chugwater and Slater were the outgrowth of the cattle industry which thrived in these towns before the establishment of the major irrigation projects.

NATURAL RESOURCES

Minerals

Wyoming's first producing iron mine is located near the town of Sunrise in Platte County. The Sunrise mine was originally worked for the production of raw materials from red pigment for war paint to copper. Until recently, the district was considered one of the more important iron mines west of the Mississippi, producing about a half a million tons per year. For many years, it was the largest employer in the area as well as a major contributor to the tax base of the County and the State. However, as reported by the Mineral Division of Department of Economic Planning and Development (DEPAD), on July 9, 1980, the Colorado Fuel and Iron Corporation announced that their Platte County iron mine would be shut down immediately. The mine is on "indefinite hold" until the economic situation of the steel industry improves.

Located slightly northeast of Guernsey is one of the most modern and versatile quarry and crushing plants in the State (1950). The Mineral Division of DEPAD reports that the Guernsey Stone's dolomite quarry was a major contributor to Platte County's 1982 total mineral production of \$1,538,934. Production from Basin Engineering's marble quarry west of Wheatland, and miscellaneous sand and gravel operations also added to the County's total figure.

There are also a variety of minerals along the front range of the Laramie Mountains: copper, gold, graphite, gypsum, sericite, etc. According to present knowledge, none of these occurrences are commercial but do offer good potential for further exploration.

Land

Of Platte County's 2,033 square miles of land, approximately 81 percent is privately owned, 9 percent is owned by the federal government, and 10 percent is owned by the State. Federal ownership is distributed among the Bureau of Land Management (83,244 acres), the U.S. Forest Service (1,142 acres), the Bureau of Reclamation (29,323 acres), and other agencies (2,241 acres).

Water

Surface Water

Most of the surface water originates outside the county. The North Platte River, which flows in a southeasterly direction through the northern end of Platte, along with the Laramie River, provide water for irrigation, recreational, industrial, and municipal use in the County.

As mentioned above, the first irrigation development was the Wheatland Project, which made water available to irrigators in 1886. By 1894 the first major storage project, Wheatland Reservoir No. 1, was developed in response to demand for a larger and more dependable water supply. In 1901 construction was completed on Wheatland Reservoir No. 2, which is located on the Laramie Plains about 50 miles from Wheatland. Construction of No. 3 Reservoir started in December, 1934. Since this time the Dutton Creek-Laramie River Diversion Canal has been built (1968) and numerous repairs and renovations have been made on what is the largest privately owned project in the United States--now referred to as the Wheatland Irrigation District Project.

Development along the North Platte River includes the Guernsey Dam and Reservoir and the Glendo Reservoir. Guernsey Dam and Reservoir, established in 1927, was built at a time when the North Platte River was relatively free-flowing. Pathfinder Dam, 190 miles upstream, was the only other major dam besides Guernsey on the North Platte River. Guernsey Reservoir provided additional storage capacity and better regulation of water. The original capacity has been considerably reduced by siltation; today it stores approximately 45,000 acre-feet of water.

The last major development on the North Platte by the U.S. Bureau of Reclamation was the Glendo Reservoir, completed in 1958. This reservoir augments power generation during non-irrigation months by storing water released upstream. Provisions have also been made for storing some irrigation water in Glendo Reservoir.

There is limited potential for developing surface water supplies along the North Platte due to the North Platte decree of 1945 and the modification of that decree in 1952. Established storage rights were fixed as follows: First, Pathfinder Reservoir; second, Guernsey Reservoir; third, Seminole Reservoir; fourth, Alcova Reservoir; and fifth, Glendo Reservoir. Most of the irrigated land in Platte County is concentrated in the Wheatland Project Area and not along the Platte River (Map of the North Platte River Basin, U.S. Department of the Interior, Water and Power Resources Service, April 1, 1980); therefore, the decree does not adversely affect the irrigation system of the County.

Guernsey State Park and Glendo State Park are located at the Guernsey and Glendo Reservoirs, providing major outdoor recreation facilities for Platte County as well as state residents. The Guernsey Reservoir offers boating and water skiing with only limited fishing (because of reservoir operations). Fishing and other water related activities are provided on the Glendo Reservoir.

Grayrocks Dam and Reservoir lies in the valley of the Laramie River about 21 miles northeast of Wheatland. The Reservoir is the primary water source for operation of the Laramie River Station, an electric generating plant. Recreational plans and a fish and wildlife management program has been developed through the cooperation of the Missouri Basin Power Project and the Wyoming Game and Fish Department. The project has also signed agreement with the Corn Creek Irrigation District, which provides water for the potential irrigation of Goshen County farmland.

Ground Water

Ground water investigations have revealed that water suitable for domestic and stock uses can be obtained at "reasonable depths" throughout most of the County.

PEOPLE

In 1970, Platte County had a population of 6,486 people. This population was evenly

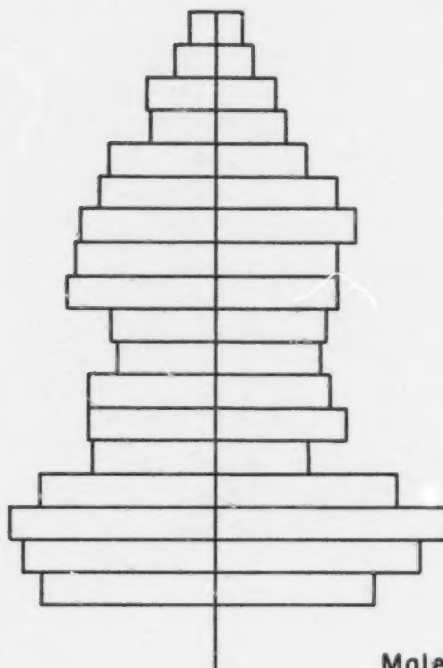
Figure 4: Platte County; Age by Sex in 5 Year Age Groups, 1970, 1980

Age Group

1970

6486 = Total Population

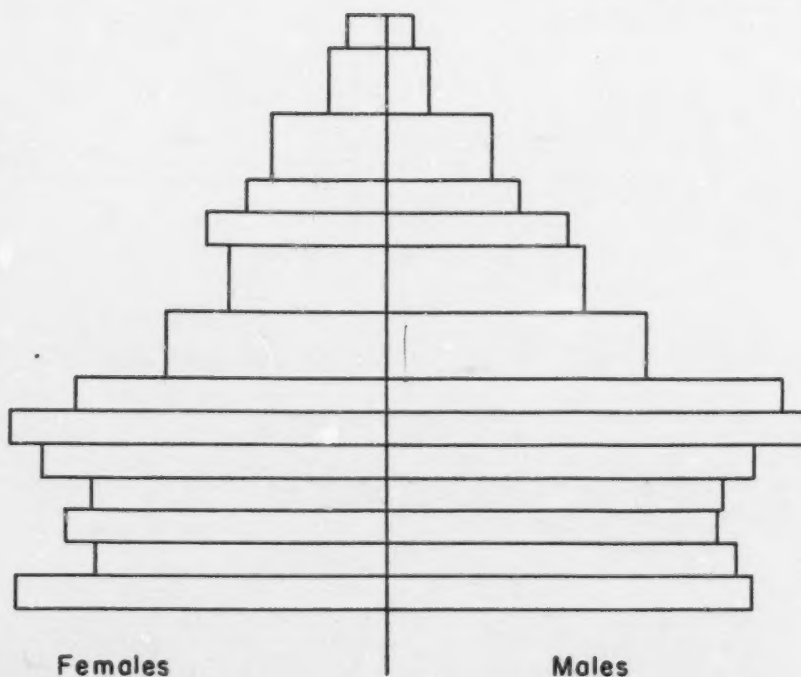
>85
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4



1980

11975 = Total Population

>85
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4



distributed between Wheatland, other incorporated towns, and rural areas of the County. The 1970 census further showed Platte County residents as slightly older on the average than was true for the State. The high concentration of older citizens was partially a result of the out-migration of the County's younger population, which was itself due to declining agricultural employment and lack of employment in other sectors. The average County resident was 33.7 years of age, compared to 27.2 years for Wyoming. In 1970, 19.33 percent of Platte's citizens were older than 60 years of age--only three Wyoming counties had a higher percentage of elderly.

That was the general demographic situation of Platte County when, in July of 1974, participants of the Missouri Basin Power Project (MBPP) proposed to construct and operate a 1500 megawatt generating station five miles northeast of Wheatland. Construction began in July, 1976. Commercial operation of Unit #1 began in the fall of 1980. (NOTE: The last of three units was scheduled to begin operation by April, 1982).

As predicted by numerous impact studies, the population of Platte County nearly doubled, registering an 84.63 percent increase in 1980 over 1970. Most of the population growth resulting from the construction and partial operation of the power plant centered in Wheatland. This major municipality experienced a growth of 132.83 percent from 1970 to 1980 (from 2,498 residents to 5,816), accounting for 60.45 percent of the county's total increase.

Another impact on the County's population is seen in the age distribution of its residents (Figure 4). Platte's population moved closer to the age distribution of the State: the 1980 census reported a median age of 28.50 for Platte County and 27.10 for the State. The change was due to an increase in school age children, increases in persons 20 to 65 years old, and a stable population aged 65 and over (which resulted in a decrease in the 65-and-over population to where it represented only 9.04 percent of the County's population).

A combined effect of the increased population and increased costs of living brought about an increase in the need for Public Assistance. Both the number of AFDC recipients and food stamp recipients reached a peak during the years of 1980 and 1981 (Figure 2b). AFDC payments approached \$179,932 in the County during 1981. Figures shown in Table 3 for 1982 indicate a decline in Platte's population as well as the beginning of a healthy downward trend for the demand of AFDC and food stamp monies.

It should be noted, that if the decision to build the Laramie River Station in Platte County had not been made, it is highly likely that the general declining trend (since 1940) of the County's population would have continued.

ECONOMY

Historically, the agricultural sector of the economy was the most important in Platte County; but, hard hit by the depression, the agricultural economy began to fade during the 1930s. Although the County recovered from the depression, this decline was reinforced during the 1940s and '50s by two trends in agriculture: the movement toward larger farms and increased mechanization. Low prices for farm products coupled with increasing costs for farm labor and production reinforced the downward trend in Platte's agriculture during the 1950s and '60s. Despite these reported setbacks, Platte County's economy was still based on agriculture in 1970. As shown in Table 4, agriculture accounted for 22.93 percent of Platte County's total personal income, ranked first among all other sources.

Table 4: Personal Income by Major Source (Thousands of Dollars)*

Source	Wyoming 1980		Platte County 1980		Platte County 1970	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	99980	2.46	2844	3.81	3993	22.93
Ag Serv., For., Fish and Other	13143	.32	D#	---	123	.72
Mining	1015626	24.99	6282	8.42	2080	12.13
Construction	464577	11.43	29417	39.42	1392	8.12
Manufacturing	196636	4.84	1184	1.59	252	1.47
Transportation & Public Utilities	415770	10.23	5677	7.61	1758	10.25
Wholesale Trade	193476	4.76	D#	---	171	1.00
Retail Trade	382244	9.41	7342	9.84	2223	12.96
Finance, Insurance & Real Estate	137457	3.38	1762	2.36	403	2.35
Service	458014	11.27	8720	11.68	1488	8.68
Government	687257	16.91	9883	13.24	3266	19.04
Total	4064180		74633		17149	

* REIS Data

Not shown to avoid disclosure of confidential information; data are included in totals.

However, with the construction of the Laramie River Station, agriculture was no longer the County's leading basic industry. The influx of non-agricultural people into the agriculturally-intensive area surrounding Wheatland brought about a 19.12 percentage point decline (in 1980) in agriculture's contribution to the total personal income figure. Agriculture was replaced by construction as the number one generator of income in Platte County.

During the construction period of the Missouri Basin Power Project it is reported that the work force reached a peak at 2,609 workers in July, 1979 and by March, 1981 had dropped to 1,124. Temporary and permanent housing needs and schooling facility needs employed even more construction workers. The surge in the number of hired builders coupled with the fact that these workers had a higher median income than others employed in Platte County, ranked construction as the highest source of personal income in the County in 1980. Personal income in 1980 attributable to construction was 39.42 percent, a tangible increase of 385.47 percent over 1970.

While government maintained its position as the second leading generator of income from 1970 to 1980, services increased during this period to be ranked third. The 34.56 percent (not percentage point) expansion in services can also be related to the development of the Laramie River Station. The resulting influx of people increased the demand for services supported by the County, thus boosting employment opportunities in the service sector of the economy.

The general attitude among town and county officials was that the Laramie River Station was basically a positive "shot in the arm" for Platte County. Notwithstanding changes in the major sources discussed above, Platte County's total personal income swelled 335.20 percent between 1970 and 1980; well in excess of the approximate 100 percent rate of inflation for the 1970s. Still other indications that the County experienced prosperity during the construction phase of the Project are increased employment figures and sales and use tax collections in 1980 (Table 3).

OUTLOOK

The population and the economy of Platte County "boomed" in 1980. Whether a "bust" is to follow, as many earlier predications have indicated, is unclear; there are mixed signals present. An encouraging sign is the nearly completed Missouri Basin Power Project which will be meeting the electric power requirements of six consumer-owned utilities in the Missouri River Basin through the mid-1980s. As a major employer in the county, Basin Electric is currently employing 400 workers at their power plant. The build-up of public services that occurred during the construction of the project might also serve to stimulate a larger economy than is presently indicated.

Recent estimated population figures and economic indicators for the county reflect a different outlook for the future. Population estimates show a gradual decline in 1981 and 1982 from the peak population of 11,975 recorded in 1980. Average unemployment rates rose significantly in 1981 and 1982 over 1980 (1980: 5.975; 1981: 7.6; 1982: 7.1).

These population and employment figures on the surface do not provide a favorable outlook for the future of Platte County. However, looking beyond the 1981 and 1982 population estimates, the Division of Research and Statistics of the Department of Administration and Fiscal Control forecasts that 1983 will begin a cycle of steadily rising population in the County---a trend typical of "boom" towns. Also, completion of the major construction phase of the Basin Project is not totally accountable for the rise in unemployment in 1981 and 1982. The closing of Colorado Fuel and Iron Corporation's Platte County iron mine along with the nationwide economic conditions in general were also contributors to this increase. Furthermore, Platte County saw a slight 6.58 percent decrease in the average unemployment during these recessionary times.

Sources:

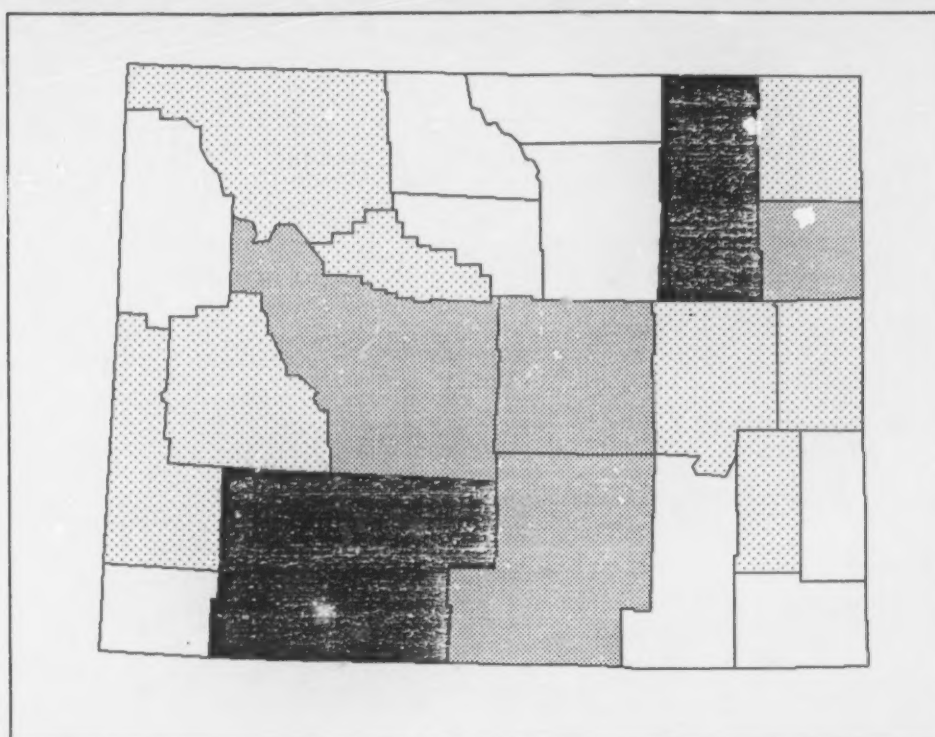
- Economic Blueprint Component of Public Investment Plan: Wheatland, Wyoming. Prepared for State of Wyoming, Department of Economic Planning and Development by Wyoming Industrial Development Corporation (1975).
- Platte County Recreation Plan: Background, Demand, Strategies. Recreation Office, Platte County Parks and Recreation District (July 20, 1977).
- Rural Platte County Comprehensive Plan. The Platte County Joint Planning Office (January, 1977).
- Social Impact Assessment of the Proposed Laramie River Station. Prepared by the Department of Sociology, University of Wyoming (December, 1975).
- Socioeconomic Impacts of Power Plants. Prepared by Denver Research Institute and Browne, Bortz, & Coddington for Electric Power Research Institute (February, 1982).
- The Socioeconomic Impact of the Proposed Laramie River Station. The Division of Business and Economic Research, University of Wyoming (August, 1975).
- Wheatland, Wyoming: 1982 Community Profile. Industrial Development Division of Department of Economic Planning and Development.
- 1981 Governor's Resource Management Tour: Platte and Goshen County. Wyoming Executive Department (June 17-19, 1981).
- 1982 Wyoming Mineral Yearbook. Mineral Division of Economic Planning and Development. Annual Report.



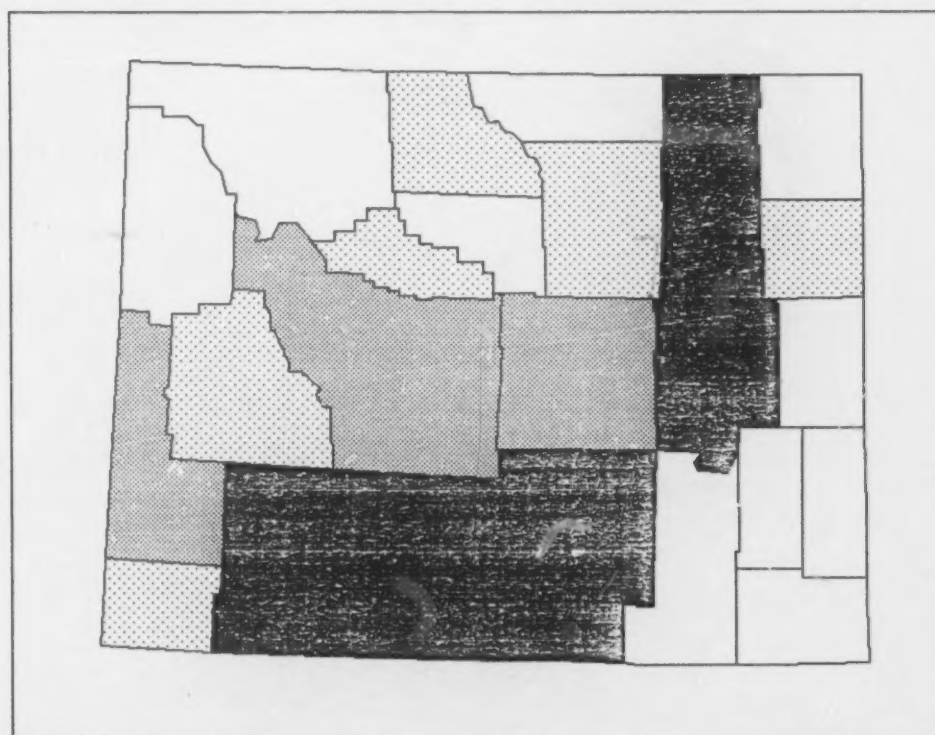
MAPS, GRAPHS

AND

DATA TABLES



Map 3: 1970 PER CAPITA INCOME FROM MINING



Map 4: 1980 PER CAPITA INCOME FROM MINING

Figure 5: Energy and Mineral Production
(10's)

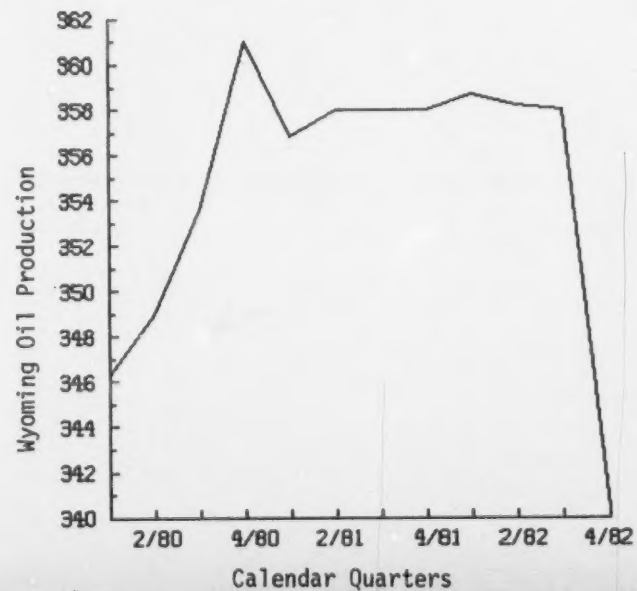
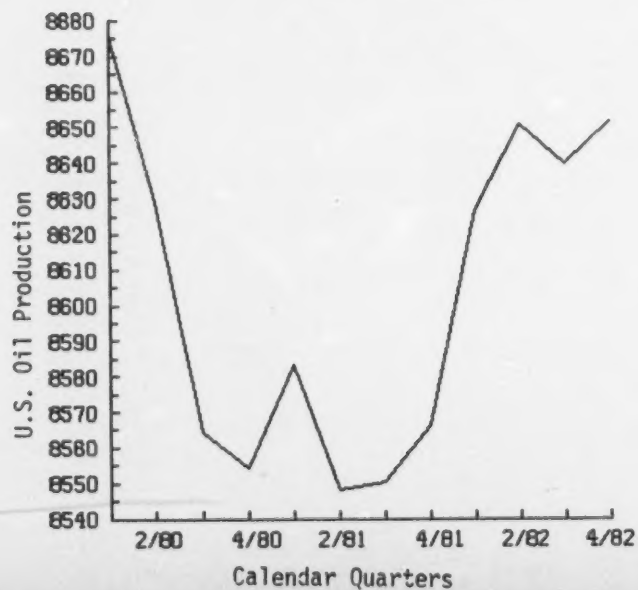
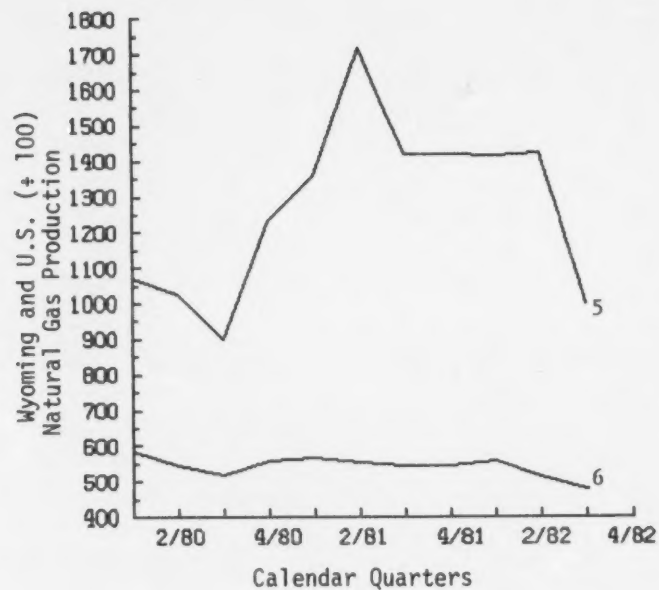
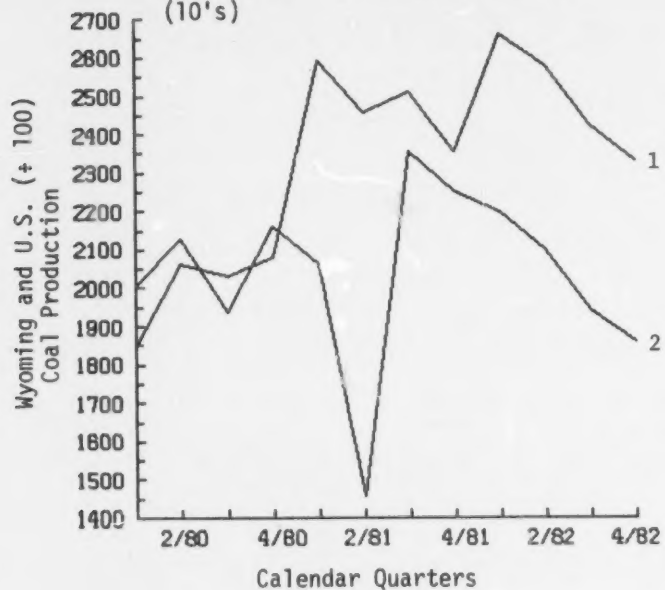


Table 5: Energy and Mineral Production¹

Calendar Quarters	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82
1. Wyoming Coal (TST)	18487.	20630.	20297.	20799.	25901.	24574.	25108.	23556.	26586.	25809.	24257.	23292.
2. U.S. Coal (TST)	200763.	212651. ²	193760.	216015.	206426.	145696.	235672.	224793.	219743.	209771.	194158.	185857.
3. Wyoming Oil (TBDP)	346.	349. ²	354.	361.	357.	358.	358.	358.	359.	358.	358.	340.
4. U.S. Oil (TBDP)	8676.	8629. ²	8565.	8554.	8583.	8548.	8550.	8566.	8627.	8650.	8640.	8652.
5. Wyoming Natural Gas (MCFD)	1071.	1028.	901.	1232.	1358.	1717.	1124.	1421.	1418.	1426.	972.	INA
6. U.S. Natural Gas (MCFD)	58381.	54300.	51777.	5776.	56830.	55120.	54347.	54298.	55737.	51242.	48183.	INA

With the wheels of American industry slowed by the recession, it is not surprising that coal inventories grew, and eventually production had to be cut back. Nationwide, coal output during 4/82 was off 4.3 percent from the preceding quarter, and off 17.3 percent compared to 4/81. In Wyoming, 4/82 coal production was off 4.0 percent compared to 3/82, and 1.1 percent compared to 4/81. For all of 1982, Wyoming's coal production rose 0.8 percent, compared to 1981; a rate of growth far below previous years. Southern Wyoming mines have been hardest hit by the weakening of coal markets.

Wyoming's 4/82 oil production slipped a full 5.0 percent compared to both 3/82 and 4/81. Nationwide, production during 4/82 was virtually unchanged over previous quarters. Even when oil prices were rising Wyoming's oil output was barely able to hold steady. Now that price decreases appear likely, future output is very uncertain. In any case, the state government anticipates revenue losses of \$15 million for each \$1 drop in the international price of crude oil.

As is usually the case, natural gas production during the third quarter was off significantly compared to the previous colder spring and winter quarters. If normal seasonal trends continue, 4/82 and 1/83 natural gas output should be well above 3/82 consumption, even with the extremely mild winter weather observed in Wyoming during January and February, 1983.

The accompanying maps indicate how per capita mining income of Wyoming counties has changed both absolutely (see the key to the right of the maps) and spatially during the 1970's. Converse and Carbon County have joined Campbell and Sweetwater Counties as the states most heavily mining-oriented counties. Relatively speaking (compared to other counties), the importance of mining increased in Lincoln, Uinta (overthrust belt), Converse, Carbon, Big Horn, and Johnson Counties, and decreased in importance in Crook, Weston, Niobrara, Platte, and Park Counties.

¹First time readers of WQU should refer to the "Format" page (in back) for an explanation of abbreviations and table formats.

²Datum shown is an estimate. Some data components are unavailable.

Sources: Series 1, 2, 5, and 6: U.S. Department of Energy. Energy Data Reports. Gas data are published monthly, and coal data are published weekly.
Series 3-4: The Oil and Gas Journal. U.S. and Wyoming Oil Production. Published weekly.

Figure 6: Agriculture
(10's)

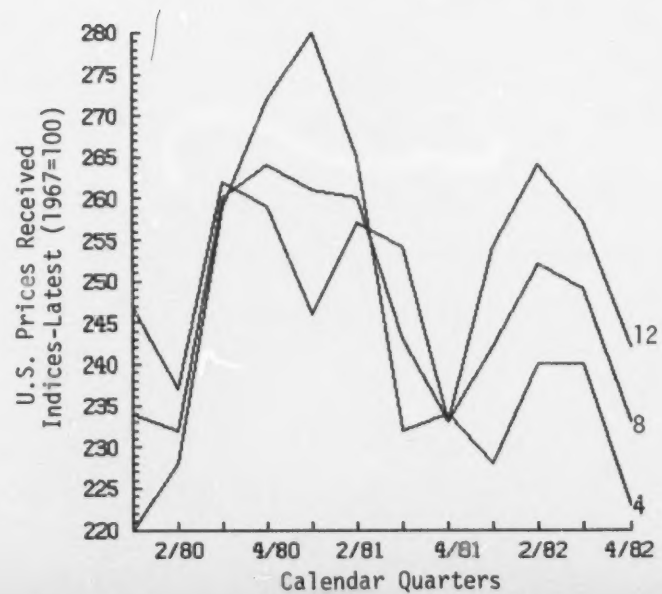
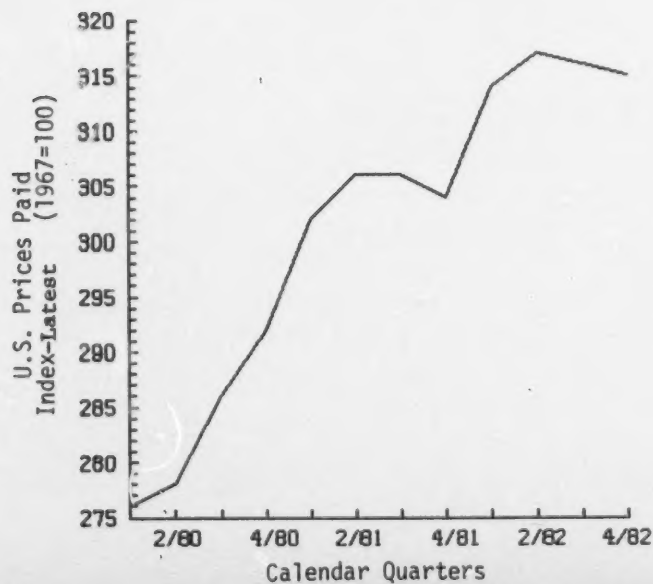
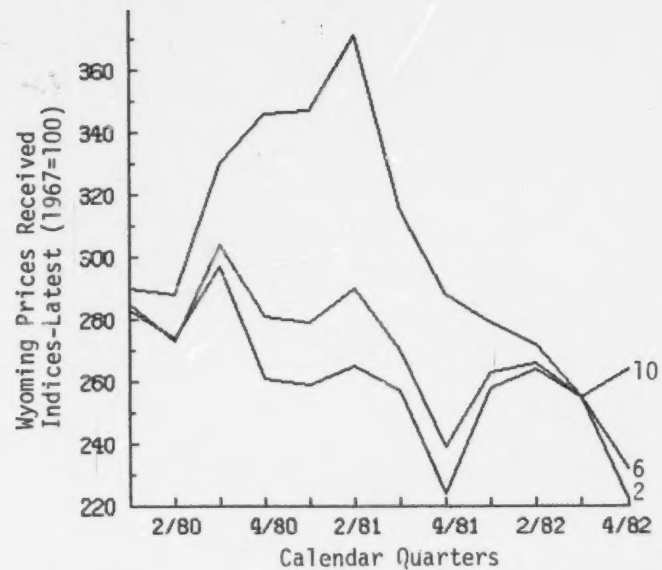
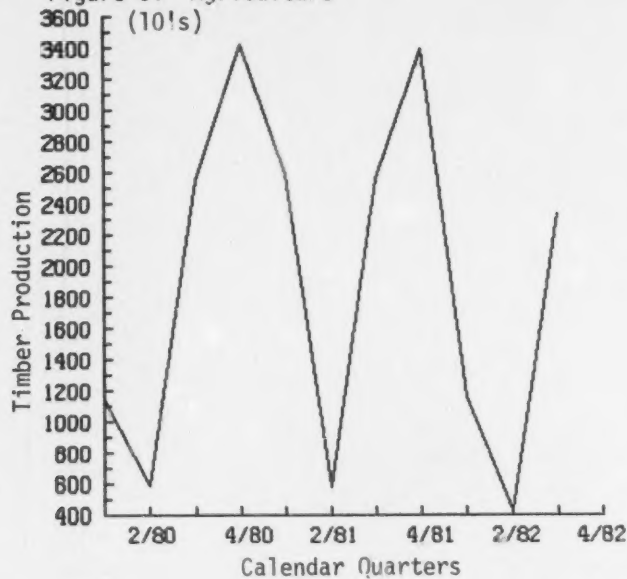


Table 6: Agriculture

Calendar Quarters	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82
1. Timber Cut in Wyoming National Forests (MBF)	11372.	5866.	25538.	34190.	25895.	5810.	25613.	33929.	11658.	4285.	23430.	INA
Price Indices (1964=100)												
2. Wyoming Crops, Prices Received-Latest	290.	288.	330.	346.	347.	371.	315.	288.	279.	272.	255.	264.
3. Wyoming Crops, Prices Received-Average	279.	282.	308.	316.	350.	347.	325.	301.	283.	273.	256.	262.
4. U.S. Crops, Prices Received-Latest	220.	228.	259.	272.	280.	265.	232.	234.	228.	240.	240.	223.
5. U.S. Crops, Prices Received-Average	221.	223.	251.	267.	278.	271.	249.	232.	234.	238.	238.	223.
6. Wyoming All Commodities, Prices Received-Latest	285.	273.	304.	281.	279.	290.	270.	239.	263.	266.	255.	232.
7. Wyoming All Commodities, Prices Received-Average	281.	273.	285.	281.	277.	284.	267.	251.	248.	266.	251.	240.
8. U.S. All Commodities, Prices Received-Latest	234.	232.	260.	264.	261.	260.	243.	233.	242.	252.	249.	233.
9. U.S. All Commodities, Prices Received-Average	237.	229.	255.	263.	263.	260.	252.	236.	241.	250.	249.	235.
10. Wyoming Livestock, Prices Received-Latest	283.	274.	297.	261.	259.	265.	257.	224.	258.	264.	255.	222.
11. Wyoming Livestock, Prices Received-Average	282.	272.	282.	274.	255.	266.	250.	236.	238.	264.	250.	233.
12. U.S. Livestock, Prices Received-Latest	247.	237.	262.	259.	246.	257.	254.	233.	254.	264.	257.	242.
13. U.S. Livestock, Prices Received-Average	251.	234.	259.	261.	250.	251.	256.	240.	247.	262.	259.	246.
14. Prices Paid by U.S. Farmers-Latest	276.	278.	286.	292.	302.	306.	306.	304.	314.	317.	316.	315.
15. Prices Paid by U.S. Farmers-Average	273.	276.	284.	291.	300.	305.	306.	305.	313.	315.	317.	315.

The usual increase in timber production between the second and third quarter was observed in 1982. However, 3/82 timber cut was off 8.5 percent from 3/81. Complete data for 4/82 timber cut were not available at press time. However, the data for national forests in the eastern two-thirds of Wyoming indicate a decline of 14.4 percent between 3/82 and 4/82. The normal seasonal pattern for all of Wyoming's national forests is a significant increase between third and fourth quarters.

Plagued by larger surpluses, most agricultural price indices continued to sag. The one exception was Wyoming crop prices, which were up 3.5 percent in December, 1982, compared to September, 1982. However, between 4/81 and 4/82 Wyoming's crop prices slipped 8.3 percent. The data do offer a truly bright note though. The end of 4/82 saw the second consecutive 0.32 percent quarterly decline in U.S. farmers' production costs.

¹The index for the last month (latest) of each quarter, along with the average of the three monthly indices of each quarter.

Sources: Series 1: United States Forest Service. "Timber Cut and Sold, Convertible Products." Region 2 and 4 reports published quarterly.
Series 2-15: Wyoming Crop and Livestock Reporting Service. Bi-weekly Ag Statistics.

Figure 7: Tourism

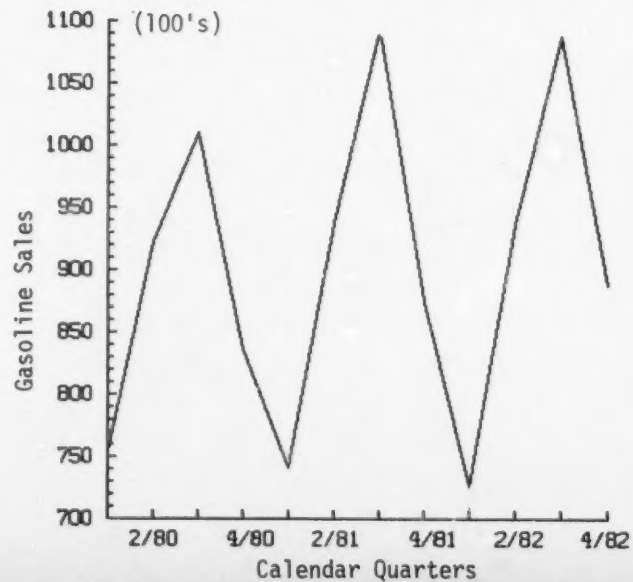
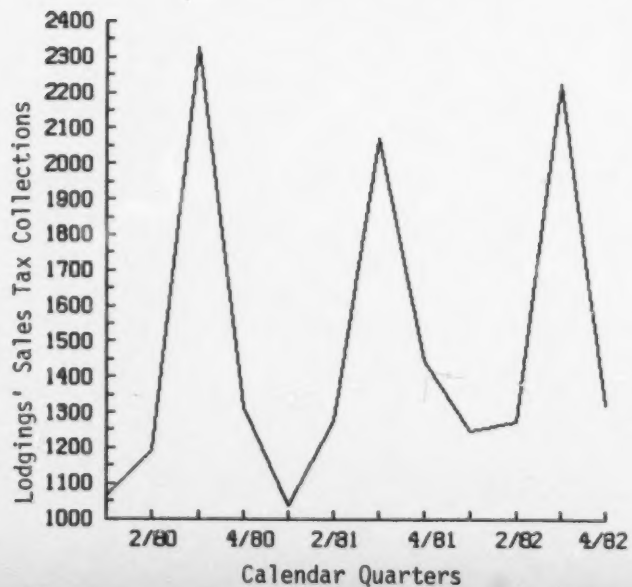
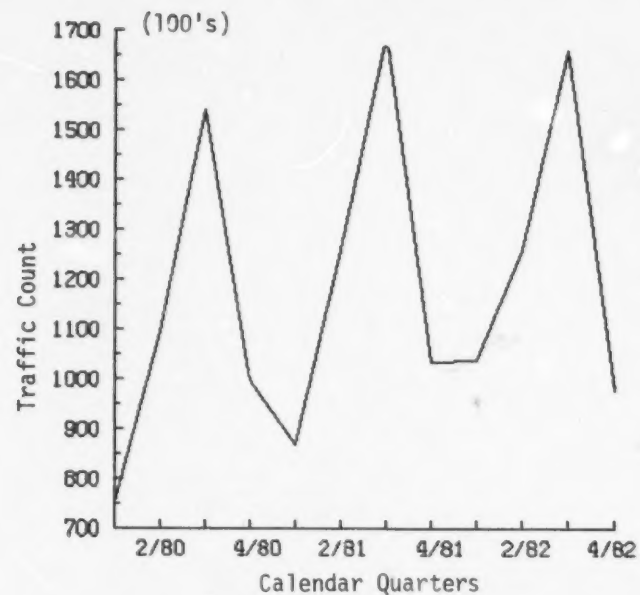
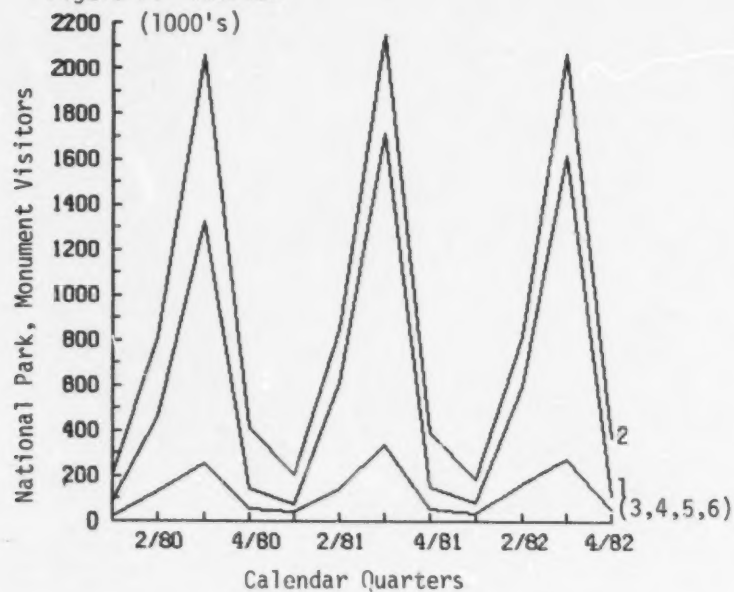


Table 7: Tourism

Calendar Quarters	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82
<u>Visitors, National Parks and Monuments</u>												
1. Yellowstone	89609.	459974.	1323837.	144039.	74693.	609642.	1715175.	149682.	82758.	600071.	1614242.	116082.
2. Grand Teton	205415.	814813.	2055989.	412817.	206147.	847464.	2147775.	393843.	185935.	820236.	2066704.	371007.
3. Devil's Tower	7600.	51992.	144042.	12346.	13425.	63064.	205660.	18159.	9425.	86305.	161989.	13232.
4. Fossil Butte	91.	2864.	6857.	1421.	339.	3795.	7769.	1018.	596.	6691.	10303.	1601.
5. Fort Laramie	3630.	27621.	52608.	6337.	6309.	40192.	64598.	10190.	5037.	31447.	51881.	6906.
6. Big Horn NRA-South ¹	10564.	45481.	49499.	35422.	18509.	34846.	56566.	27820.	17701.	42059.	53939.	30720.
<u>Other Tourism Indicators</u>												
7. Traffic Count (Avg. # of Vehicles/Day)	75203.	109530.	154224.	99772.	86957.	125992.	169095.	103438.	103864.	126037.	166170.	97892.
8. Hotel, Motel, and Camp Sales Tax (1000's \$)	1064.	1189.	2326.	1315.	1036.	1272.	2073.	1447.	1247.	1273.	2226.	1323. ²
9. Gasoline Sales (Gallons)	75338.	92212.	101065.	83626.	74027.	93721.	109335.	87500.	72548.	93556.	108718.	88000.

Tourism exhibited its usual seasonal decline during the fourth quarter. Except at Fossil Butte and Big Horn Canyon, fewer visitors came during 4/82 than during 4/81. The decline is probably due to the poor fall weather, and the fact that by 4/82, the nation's economy had been plagued by a serious recession for over a year.

More interesting is a comparison of data of the last few full years. The roughly 2.4 million visitors of Yellowstone National Park (YNP) in 1982 represented a 5.3 percent decline from 1981 visitation levels, and an 8.0 percent drop compared to the record visitation levels recorded in 1978. Making identical comparisons for Grand Teton National Park (GTNP) reveals declines of 4.2 and 17.2 percent, respectively, compared to 1981 and the peak year 1978. Judged in light of the poor spring and summer weather during 1982, and the fact that one of the nation's worst recessions began, officially, in July, 1981, tourism during 1982 has been surprisingly robust.

Sales tax collections by hotels, motels, and campgrounds is a good indicator of tourist tight-fistedness. When tourists become more budget-minded, one of the first expenditures to be cut back is lodging. Cheaper campground and back-country accommodations are substituted for hotel-motel use. The data do not indicate that such a trend is widespread. The 1982 lodgings' sales tax collections were up 4.1 percent from 1981; just two percentage points short of keeping pace with inflation.

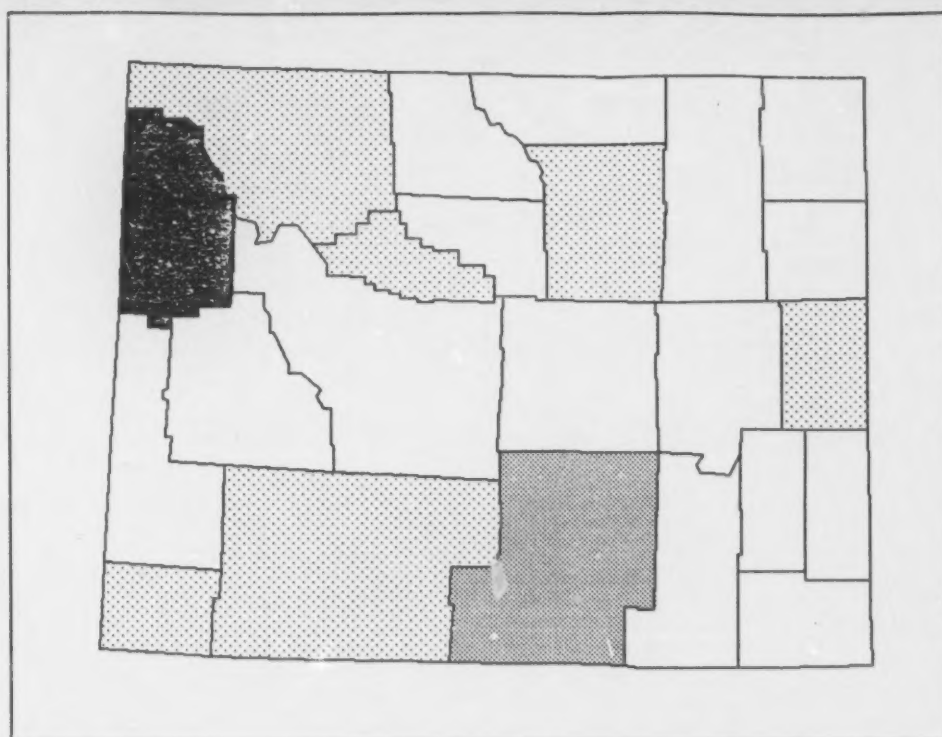
Tourism-related enterprises will be among the first to benefit from the nationwide economic recovery which appears to have arrived with the new year. The impact will be especially large if the current trend towards lower gasoline prices accelerates.

Map 5 and 6 indicate which counties derive the most income from travel. Teton County is far in front of all other Wyoming counties in Lodgings' tax collections per capita. The importance of Interstate 80 is reflected on both maps for the three western counties along its route.

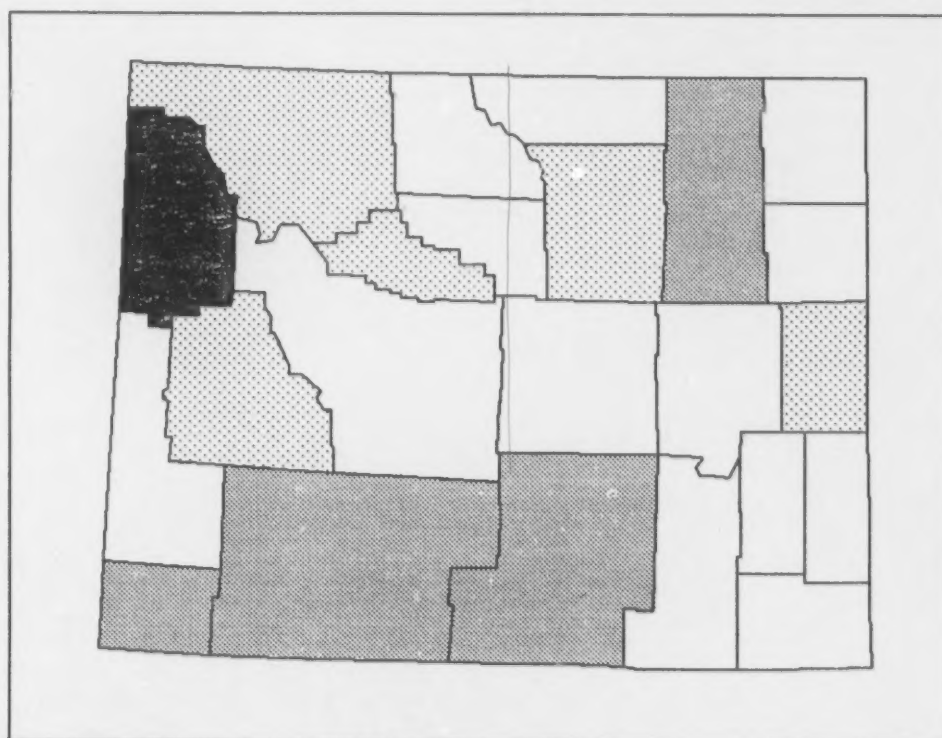
¹Big Horn Canyon N.R.A. is only partially in Wyoming. Only visitation for the Wyoming part is shown.

²Estimate based on trend and actual data for the first two months of the quarter.

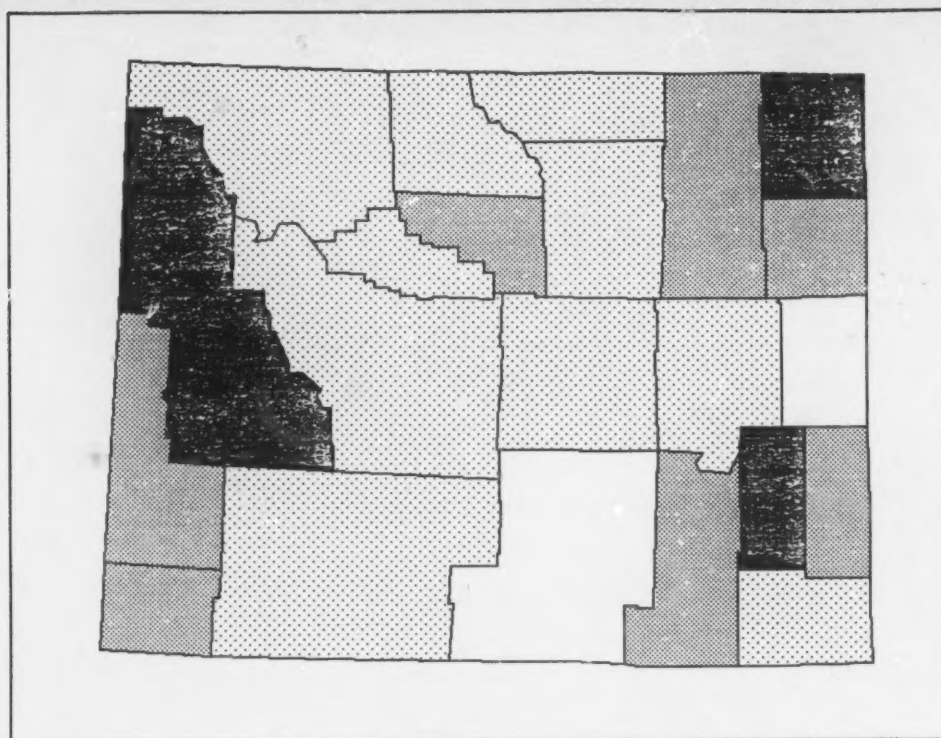
Sources: Series 1-6: Monthly visitor use reports of the National Park Service.
 Series 7: Traffic Survey Unit - Planning Branch, Wyoming State Highway Department. "Selected Recording Stations Traffic Counter Data."
 Published monthly.
 Series 8: Wyoming Department of Revenue and Taxation monthly report.
 Series 9: Petroleum Association of Wyoming. Monthly Gasoline Gallonage Report.



Map 5: LODGINGS' TAX COLLECTIONS PER CAPITA, 3/80



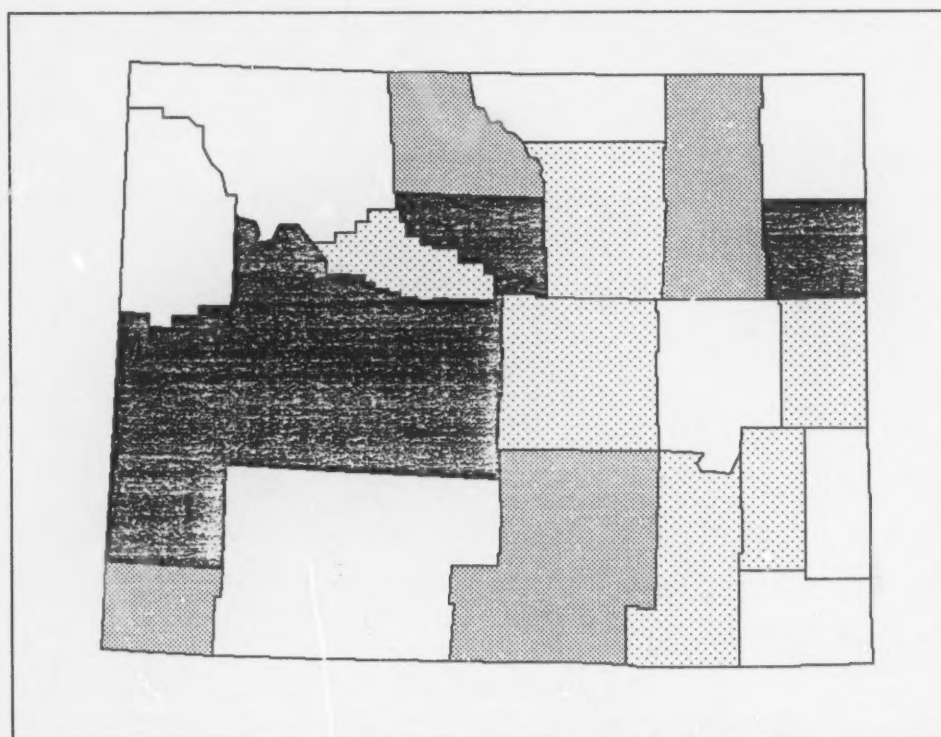
Map 6: LODGINGS' TAX COLLECTIONS PER CAPITA, 3/82



KEY: PERCENT

7.26
5.87
4.48
3.09

Map 7: THIRD QUARTER OF 1980 UNEMPLOYMENT RATE



KEY: PERCENT

10.87
9.08
7.29
5.49
3.70

Map 8: THIRD QUARTER OF 1982 UNEMPLOYMENT RATE

Figure 8: Employment and Labor
(100's)

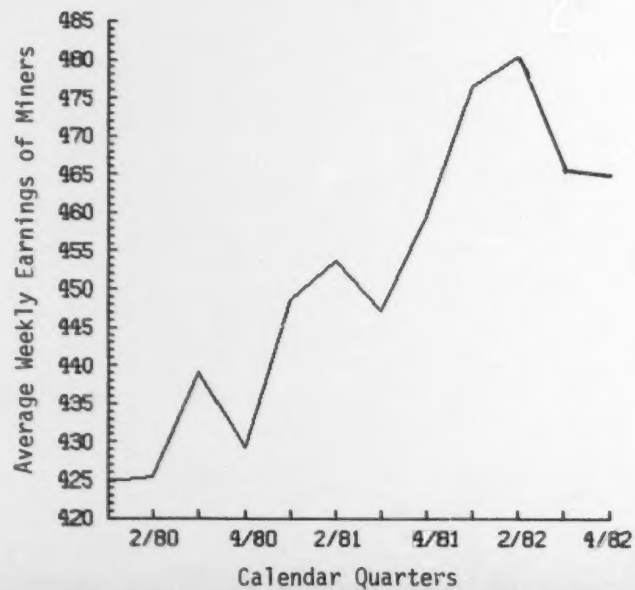
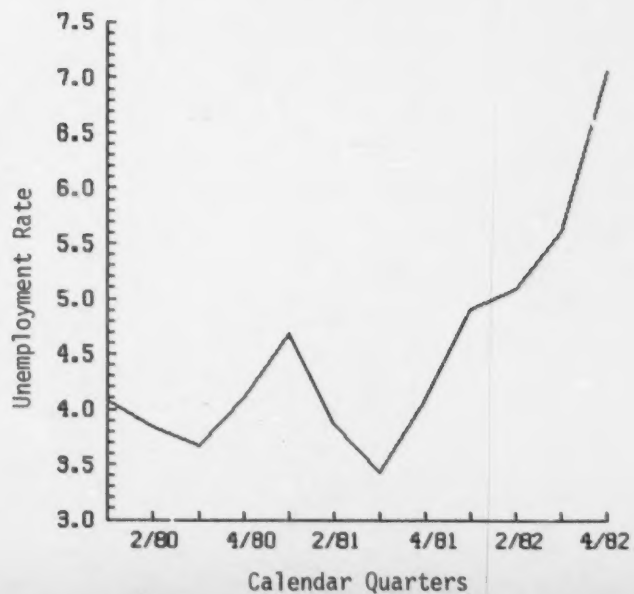
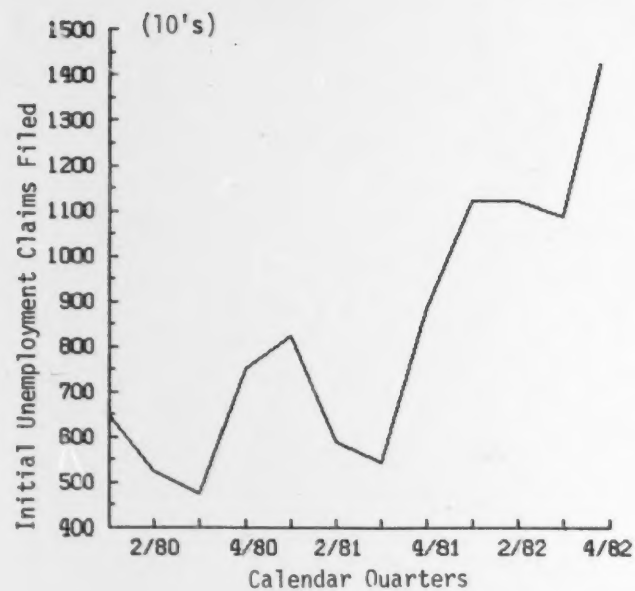
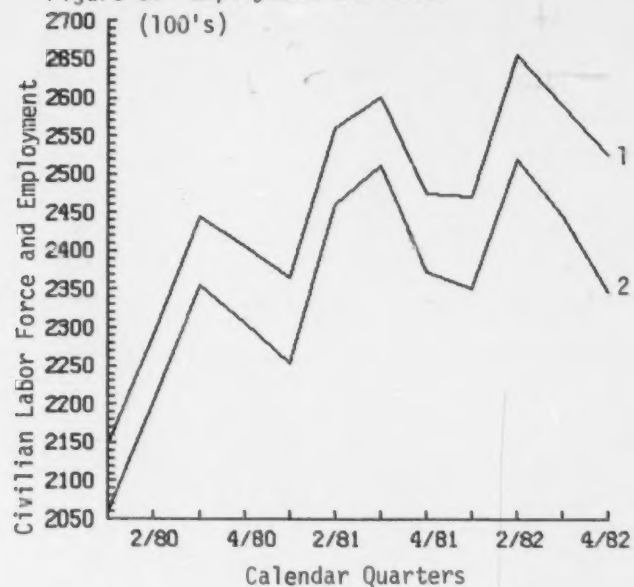


Table 8: Employment and Labor¹

Calendar Quarters	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82
1. Civilian Labor Force	214579.	228869.	244355.	240566.	236480.	255956.	260041.	247523.	247185.	265559.	259182.	252609.
2. Employment	205831.	220080.	235404.	230685.	225414.	246075.	251110.	237402.	235065.	252028.	244650.	234705.
3. Unemployment	8748.	8789.	8951.	9881.	11066.	9881.	8931.	10121.	12119.	13531.	14532.	17824.
4. Unemployment Rate	4.1	3.8	3.7	4.1	4.7	3.9	3.4	4.1	4.9	5.1	5.6	7.1
5. Initial Claims Filed	6466.	5242.	4745.	7494.	8231.	5901.	5463.	8837.2	11237.	11225.	10894.	14183.
6. Applications Received	10263.	12481.	12727.	9584.	13026.	13522.	13884.	10000.2	12070.	14838.	15359.	13112.
7. New Non-Agricultural Openings	7126.	9217.	11068.	7526.	6912.	9903.	12991.	6300.2	6119.	8344.	9190.	7035.
8. New Non-Agricultural Placements	6211.	7848.	9218.	6482.	5649.	7681.	10072.	5850.2	5138.	7161.	8079.	5450.
9. Miners' Average Weekly Hours	42.7	42.9	44.1	43.3	43.8	42.8	41.5	42.5	42.0	41.7	39.7	38.1
10. Miners' Average Weekly Pay (\$)	424.77	425.31	438.97	429.26	448.66	453.75	447.13	459.64	476.53	480.37	465.42	464.35
11. Miners' Average Hourly Wage (\$)	9.94	9.91	9.95	9.91	10.24	10.61	10.78	10.81	11.34	11.52	11.90	12.18

After a previously unheard of decrease in employment and participation in the labor force between the second and third quarter of a year, the usual seasonal decline occurred in 4/82. Compared to 4/81, the 4/82 labor force was up 2.1 percent, but employment fell 1.1 percent. Consequently, unemployment rose 76.1 percent, and the unemployment rate rose three percentage points to a 4/82 average of 7.1 percent. The trend in the unemployment points upward. In December, 1982 the unemployment rate reached 8.0 percent, and for January, 1983 it was 9.9 percent.

Initial claims for unemployment compensation during 4/82 were up 60.5 percent compared to 4/81 and 30.2 percent compared to 3/82. Applications, openings, and placements' data also reflect the recession. The fact that 4/82 applications are down from 3/82 is due to departures from the labor force because of normal seasonal factors such as resumption of school, and a discouragement factor. With the worsening of the recession, the difficulty in finding jobs usually causes a number of workers to temporarily give up and leave the labor force.

Despite slightly higher hourly wages, miners' average weekly earnings during 4/82 were down for the second straight quarter. Compared to 4/81, weekly earnings were up 1.0 percent; not enough to keep abreast of Wyoming's 2.47 rate of inflation between 4/81 and 4/82. The decisive factor has been a continuous decline for the last four quarters in hours worked. Between 3/82 and 4/82 alone, the decline was 4.0 percent.

The accompanying maps demonstrate both the change in overall unemployment (the range in the key), and its varying distribution among counties. Counties such as Teton, Crook, Platte, and Goshen were in the upper range during 3/80, but in the lower range in 3/82. In the case of Platte, and perhaps also Goshen County, the high rates in 3/80 were probably the result of the then recent completion of construction of the Laramie River Power Station near Wheatland. Other counties changed their relative position not because of a dramatic decline in their own unemployment rate, but because of substantial increase in other counties. The 3/82 map clearly reflects the mining layoffs in Carbon and Fremont Counties.

¹The most recent year's data are preliminary.

²Estimated. October and November, 1981 data are not available.

Source: Wyoming Employment Security Commission. Labor Force Trends. Published quarterly.

Figure 9: Business Conditions

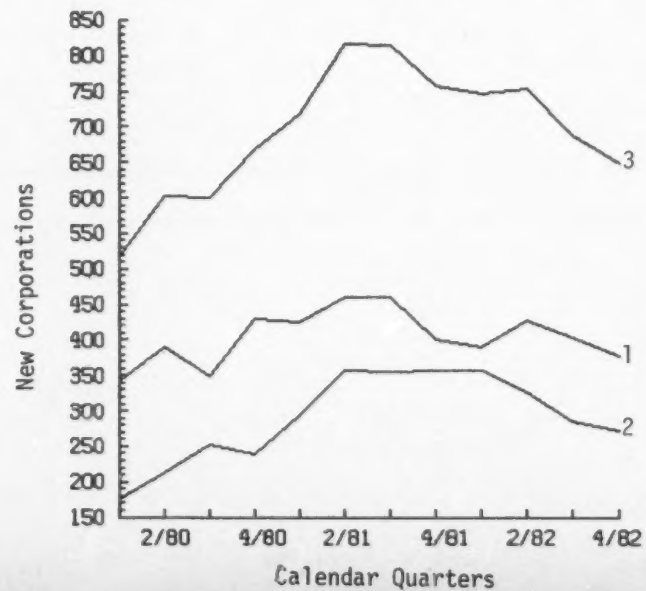
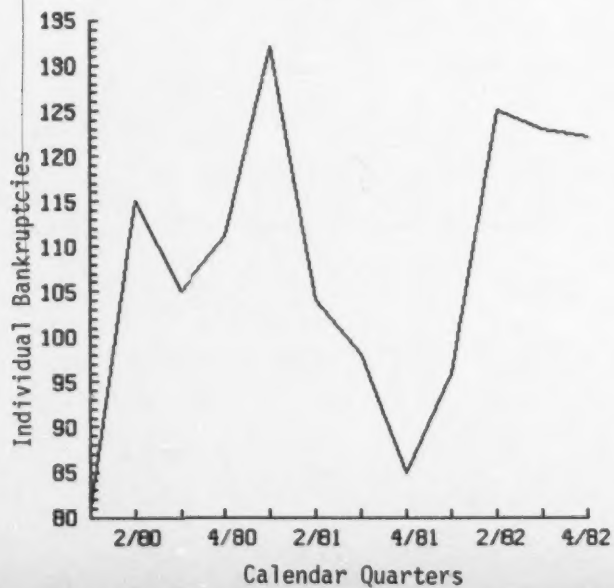
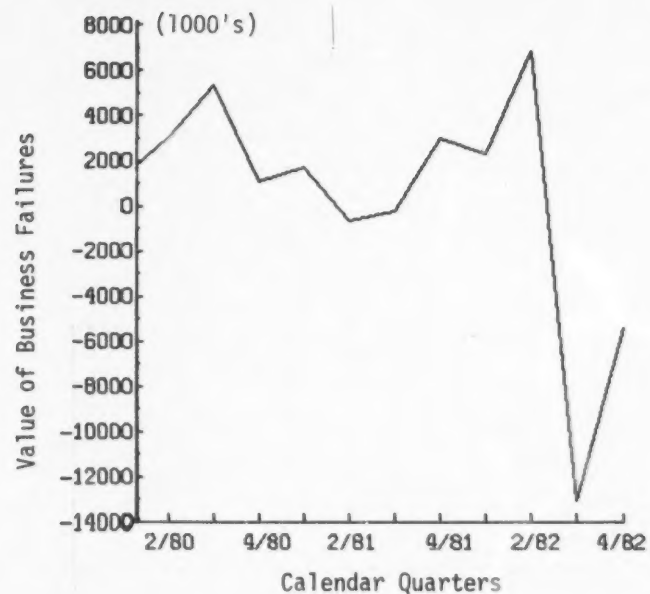
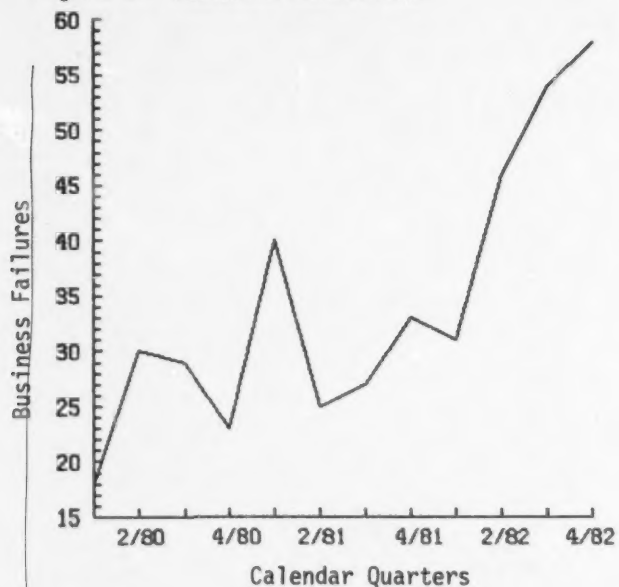


Table 9: Business Conditions

Calendar Quarters	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82
1. New Domestic Corporations	342.	391.	348.	429.	424.	459.	459.	400.	389.	428.	403.	377.
2. New Foreign Corporations	175.	212.	252.	239.	294.	357.	356.	358.	357.	326.	285.	272.
3. Total New Corporations	517.	603.	600.	668.	718.	816.	815.	758.	746.	754.	688.	649.
4. Business Failures	18.	30.	29.	23.	40.	25.	27.	33.	31.	46.	54.	58.
5. Value of Business Failures (\$)	1294403.	3020063.	5306348.	1054339.	1674135.	-635217. ¹	-240995. ¹	2987139.	2331991.	6842595.	-13034324. ¹	-5396333. ¹
6. Personal Bankruptcies	81.	115.	105.	111.	132.	104.	98.	85.	96.	125.	123.	122.

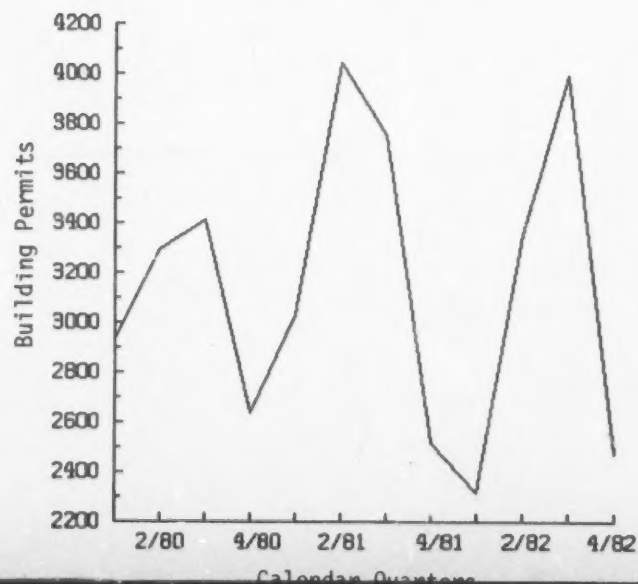
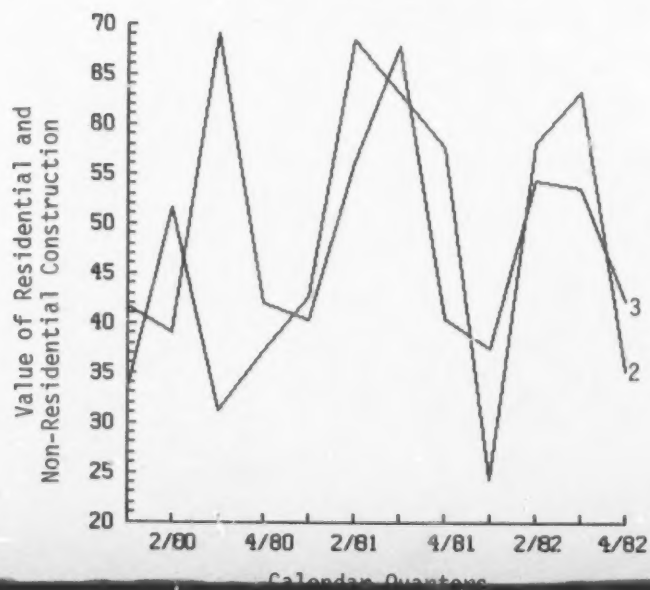
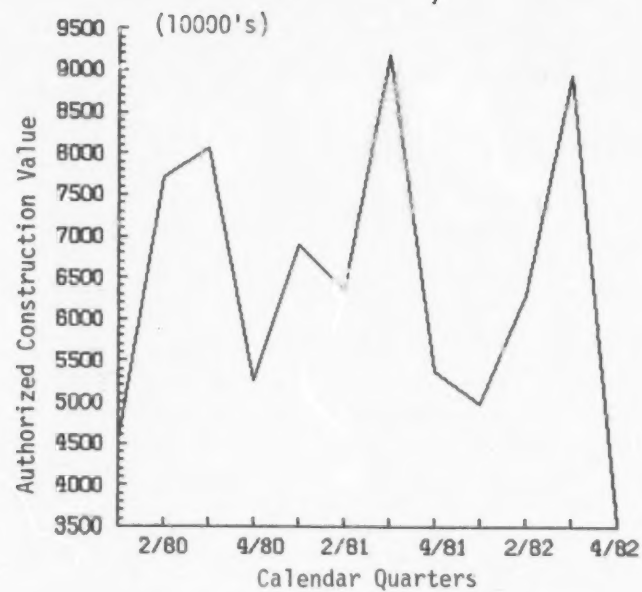
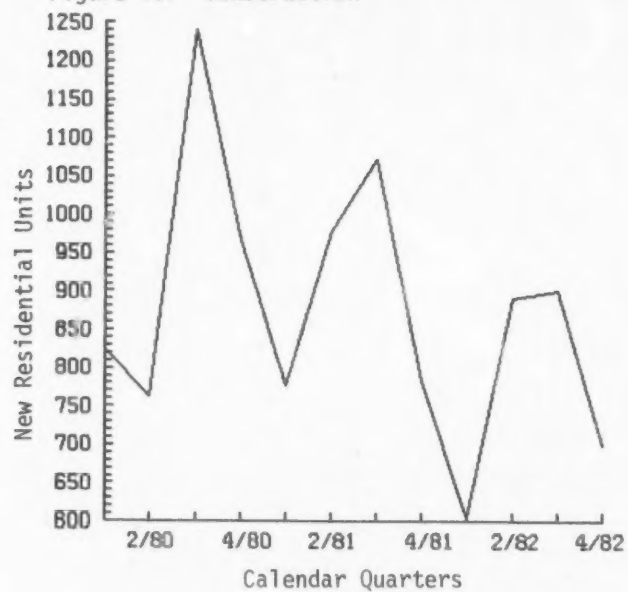
The number of domestic and foreign corporations registering to do business in Wyoming fell 6.4 and 4.6 percent, respectively, compared to 3/82, and is the lowest number since the end of 1980. The number of personal bankruptcies during 4/82 were virtually unchanged from the relatively high levels recorded in each of the two previous quarters. Only during 1/81 were more (seven to ten more) personal bankruptcies recorded than during each of the last three quarters of 1982. The number of business failures continued to increase as well. The 58 failures observed in 4/82 represents a 75.8 percent over 4/81, and a 7.4 increase over the previous record high of 54 failures witnessed in 3/82. At least creditors have had the good fortune of having the assets of failed businesses exceed liabilities during each of the last two quarters. That has lessened the tendency of initial business failures to produce a chain reaction of additional failures. After all, the unpaid liabilities of an insolvent firm are the lost assets of another business.

¹Assets exceed liabilities.

Sources: Series 1-3: Secretary of State. New and Foreign Corporations. Monthly report.

Series 4-6: Cheyenne Credit Bureau. Wyoming bankruptcy cases, business failures, and value of failures. Weekly publication.

Figure 10: Construction



ie 10: Construction

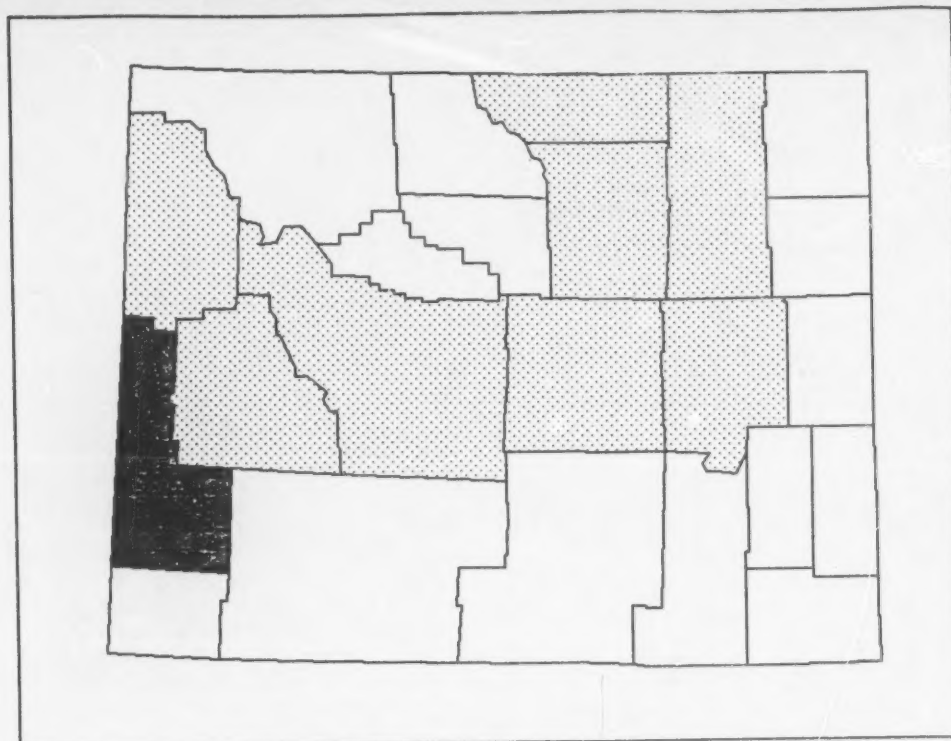
enda Quarters	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82
New Residential Dwelling Units	824.	762.	1240.	965.	777.	978.	1072.	784.	604.	891.	900.	699.
Value of Residential Dwellings Constructed (M\$)	41.6	39.0	69.0	42.0	40.2	56.1	67.8	40.4	37.4	54.3	53.6	42.3
Value of Nonresidential Construction (M\$)	33.6	51.5	31.2	37.2	42.6	68.5	63.1	57.6	24.3	58.1	63.2	35.2
Building Permits Issued in Selected Wyoming Cities	2934.	3293.	3414.	2637.	3027.	4040.	3755.	2516.	2317.	3353.	3992.	2473.
Value of Authorized Construction	45371.	77045.	80648.	52550.	68995.	63557.	91789.	53839.	49768.	62939.	89434.	35383.

As is often the case, construction activity is most reflective of the prevailing economic climate, both in good times and bad. Compared to 4/81, among the five data items shown, only the value of residential construction was up in 4/82, and then only by 4.7 percent; just barely outstripping inflation during 1982. Of the four declining categories, two, the value of non-residential construction and the value of authorized construction, fell by more than a third between 4/81 and 4/82. Given the sensitivity of construction to weather conditions, especially during fall and spring quarters when potential variability from year to year is great, more appropriate comparisons would involve entire years. A comparison of 1980, 1981, and 1982 data also indicate a severe downturn in construction activity. Between 1980 and 1981, the number of residential dwellings constructed in Wyoming fell 4.8 percent; the steepest rate of decline compared to the 14.3 percent plunge observed between 1981 and 1982. Higher new home prices and the 4.8 percent decrease in number combined to increase the value of residential construction a modest 6.7 percent between 1980 and 1981. However, between 1981 and 1982 a decline of 8.3 percent was recorded, which translates into a double digit decline when inflation is figured for. For nonresidential construction the turnaround was even more substantial. After an increase of 51.0 percent between 1980 and 1981, the value of nonresidential construction fell 22.0 percent between 1981 and 1982.

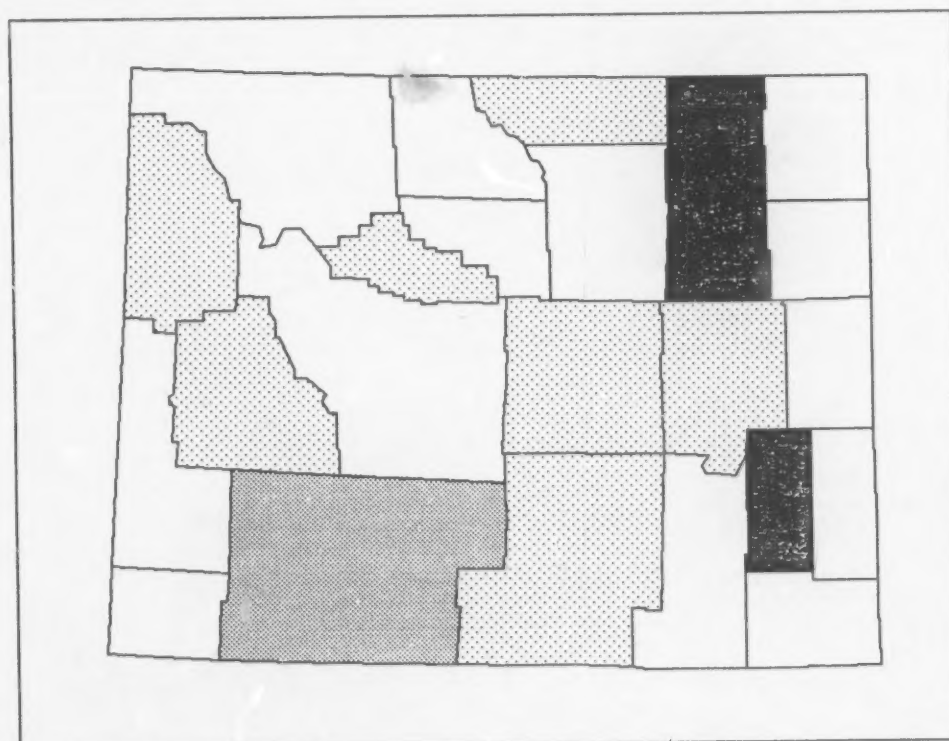
The accompanying maps provide a longer term spatial comparison. Map 14 clearly reflects the energy development activity in Yellowstone and Campbell County, and also the construction of the Laramie River Power Station in Platte County. Most of the change in construction pattern between 1970 and 1980 is due not to significant reductions in construction activity in a particular county, but to major increases in some counties.

Sources: Series 1-3: F.W. Dodge Division of McGraw-Hill. "Dodge Construction Potentials." Published monthly.

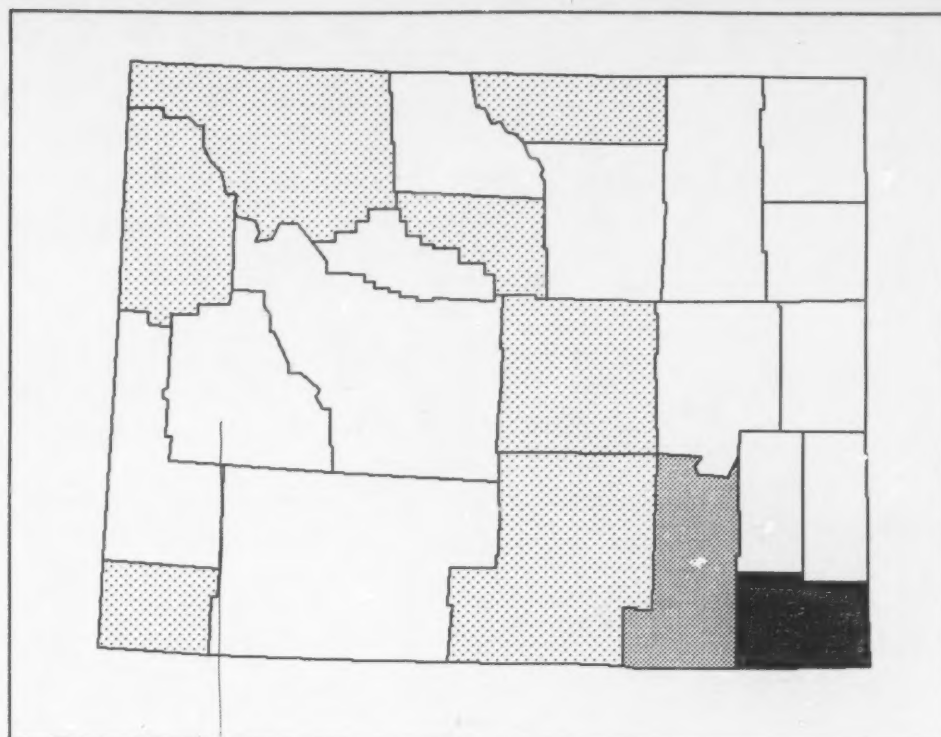
Series 4-5: Institute for Policy Research. "Local Construction Reports." Survey of authorized construction in selected cities conducted monthly.



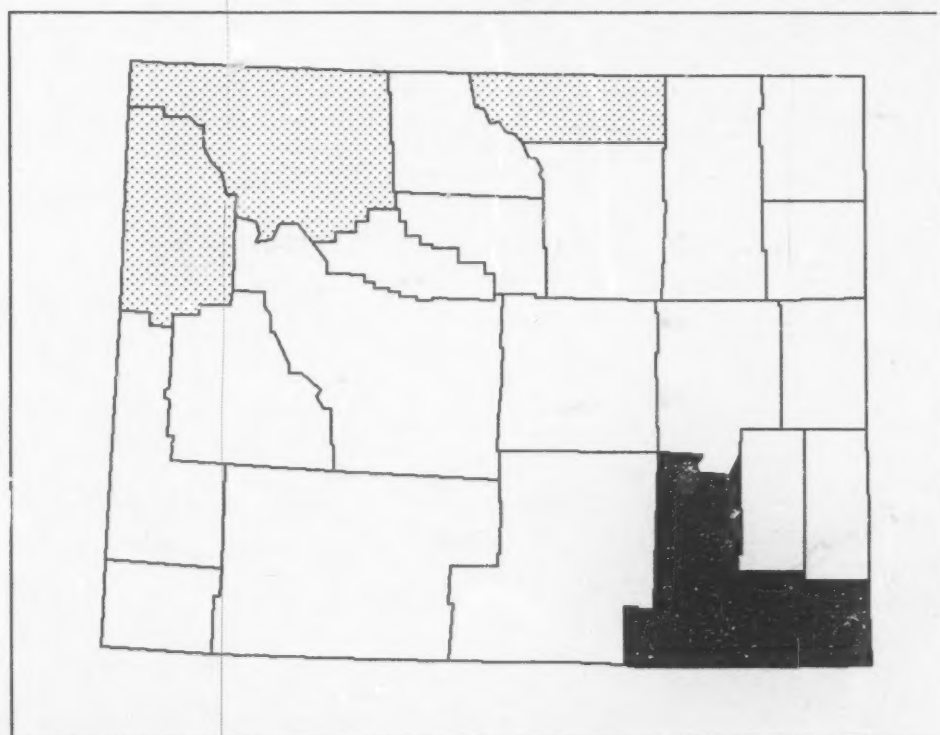
Map 9: 1970 PER CAPITA INCOME FROM CONSTRUCTION



Map 10: 1980 PER CAPITA INCOME FROM CONSTRUCTION



Map 11: 1970 PER CAPITA INCOME FROM GOVERNMENT



Map 12: 1980 PER CAPITA INCOME FROM GOVERNMENT

Figure 11: Utilities

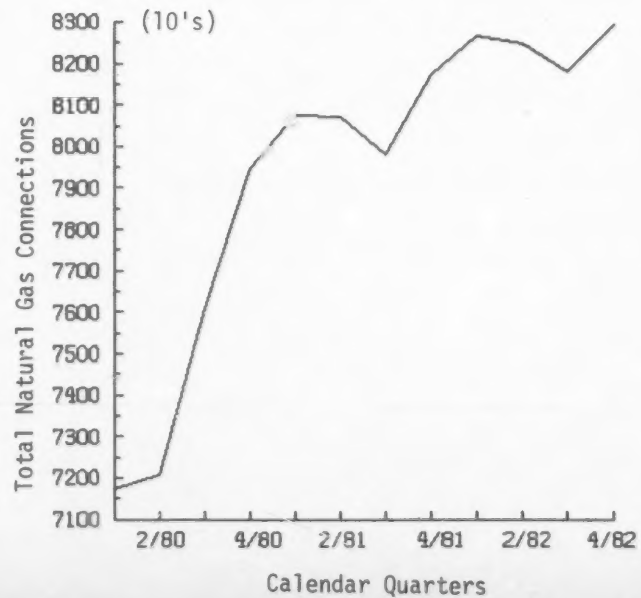
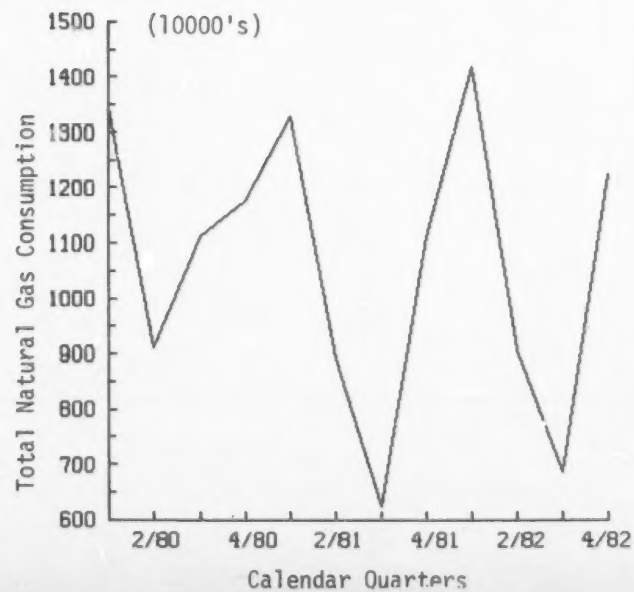
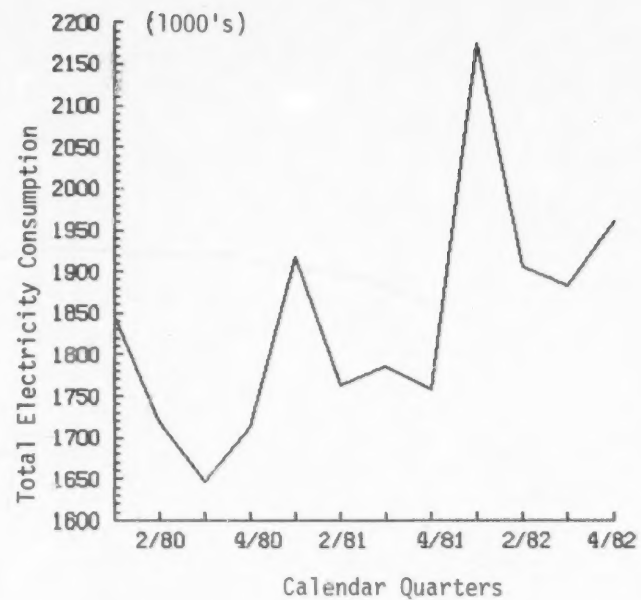
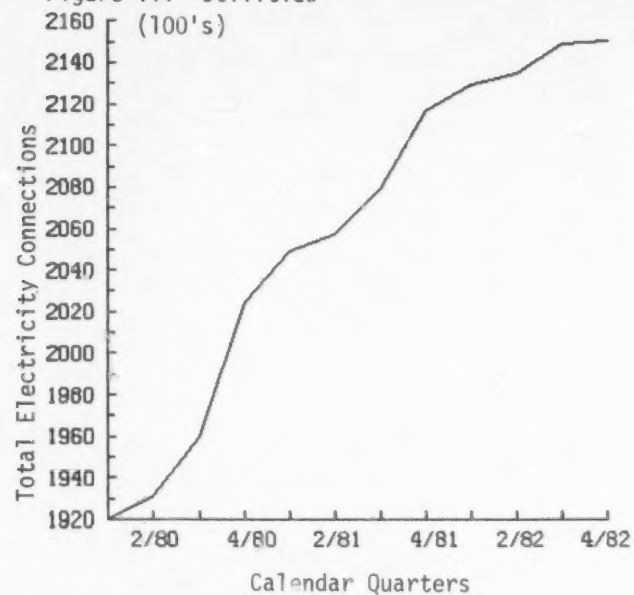


Table 11: Utilities¹

Calendar Quarters	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82
1. Residential Electric Connections	157183.	158424.	160950.	166342.	168477.	169494.	169777.	174369.	174018.	174126.	177081.	177962.
2. Residential Electric Consumption (TKWH)	430258.	319866.	264960.	335159.	487386.	331256.	282226.	218361.	504636.	375401.	302786.	391932.
3. Commercial Electric Connections	27208.	27772.	28072.	28847.	29465.	29605.	30522.	30047.	30833.	31086.	30841.	30389.
4. Commercial Electric Consumption (TKWH)	282677.	267804.	287954.	271561.	298580.	288617.	317998.	303091.	354594.	319879.	331351.	328132.
5. Industrial Electric Connections	2891.	2957.	3057.	3312.	3377.	3384.	3484.	3590.	3581.	3451.	3702.	3759.
6. Industrial Electric Consumption (TKWH)	1092324.	1096416.	1013672.	1049382.	1100964.	1097628.	1112398.	1156967.	1266782.	1179112.	1178792.	1226779.
7. Other Connections ²	4743.	3986.	3875.	3946.	3579.	3266.	4102.	3652.	4520.	4778.	3243.	2940.
8. Other Consumption (TKWH)	40623.	34114.	80540.	55639.	30333.	45006.	72994.	79409.	48237.	31570.	70139.	12611.
9. Residential Natural Gas Connections	65346.	65731.	69297.	72468.	73699.	73712.	72966.	74828.	75677.	75413.	74861.	75955.
10. Residential Natural Gas Consumption (TCF)	4236345.	2311300.	787701.	2770400.	3923502.	2180779.	814900.	2499236.	4607468.	2504865.	872772.	2972244.
11. Commercial Natural Gas Connections	6095.	6026.	6360.	6561.	6595.	6557.	6385.	6393.	6482.	6552.	6452.	6476.
12. Commercial Natural Gas Consumption (TCF)	1872572.	976489.	347976.	1125956.	1766515.	970295.	382137.	943319.	1955899.	1075767.	385052.	1196763.
13. Industrial Natural Gas Connections	87.	97.	91.	93.	92.	94.	90.	89.	89.	90.	90.	95.
14. Industrial Natural Gas Consumption (TCF)	6428686.	5564123.	9887644.	7647357.	7345317.	5607535.	4959825.	7479593.	7328389.	5335475.	5564715.	7918440.
15. Other Natural Gas Connections	189.	216.	342.	363.	348.	344.	349.	398.	400.	404.	409.	409.
16. Other Natural Gas Consumption	905796.	261674.	98459.	204268.	252249.	147575.	87695.	196349.	299920.	134722.	44697.	138389.
17. Business Telephone Connections	42299.	43347.	44319.	44702.	45795.	45495.	47932.	47828.	48501.	49003.	49179.	48824.
18. Private Telephone Connections	151860.	152883.	153874.	156290.	158740.	159456.	160688.	163100.	163790.	162953.	162126.	162409.

Natural gas and electricity consumption exhibited its usual seasonal swing between third and fourth quarters, and with only two exceptions above the levels recorded in 4/81. More interesting are the data for connections. Historical growth rates have slowed considerably; to a virtual standstill in some instances. Business telephone connections during 4/82 numbered 0.7 percent fewer than during 3/82; the first decrease recorded in recent times. After seeing its first decrease in recent times during 3/82, private telephone connections were virtually unchanged in 4/82. Those data indicate that the recession has at least temporarily slowed, or perhaps halted Wyoming's population growth.

¹ Some small utilities do not report, hence the data are slightly less than actual state totals. The data are consistent. The same utilities' reports are included in each figure.

² "Other" includes agriculture, municipal, and other public.

Source: Reports to IPR by selected Electric, Natural Gas, and Telephone Utility Companies. Survey conducted monthly.

Figure 12: Consumers

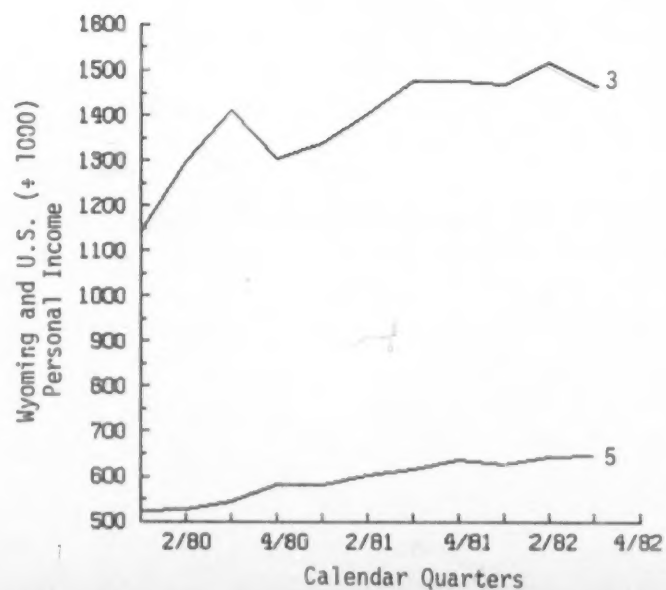
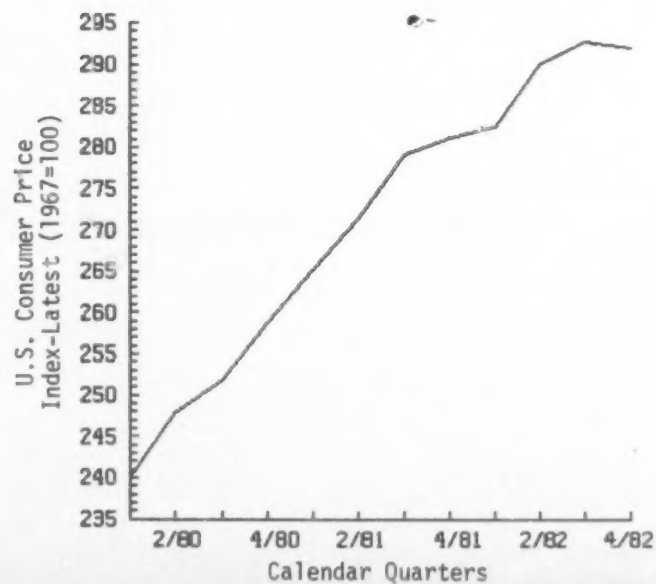
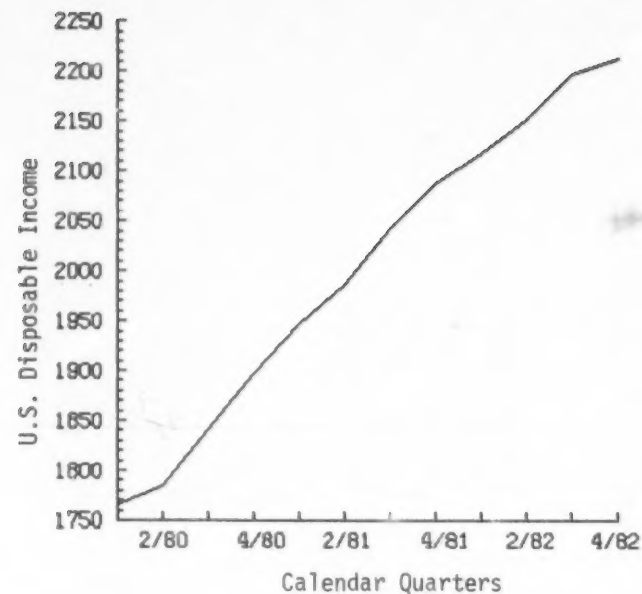
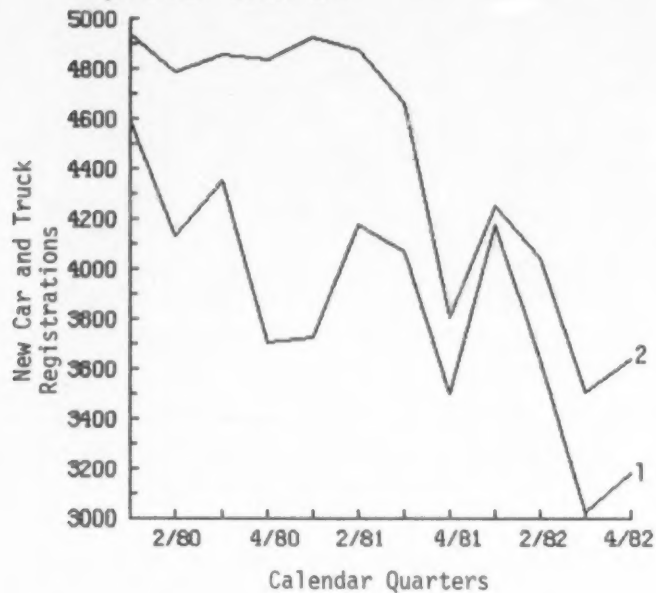


Table 12: Consumers

Calendar Quarters	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82
1. New Truck Registrations	4593.	4134.	4353.	3706.	3723.	4175.	4067.	3502.	4176.	3636.	3024.	3230.
2. New Car Registrations	4937.	4787.	4859.	4839.	4926.	4879.	4664.	3808.	4249.	4042.	3506.	3610.
3. Wyoming Personal Income (M\$)	1143.	1296.	1409.	1303.	1337.	1403.	1477.	1476.	1468.	1516.	1465.	INA
4. U.S. Disposable Income ² (B\$)	1765.	1784.	1841.	1897.	1948.	1986.	2042.	2088.	2117.	2151.	2198.	2200. ¹
5. U.S. Personal Income (M\$)	521332.	524735.	543122.	579903.	581161.	601311.	615581.	637178.	625638.	641570.	647457.	INA
6. Latest U.S. Consumer ³ Price Index (1976=100)	239.9	247.8	251.9	258.7	265.2	271.4	279.1	281.1	282.5	290.1	292.8	292.0
7. Quarter's Average U.S. CPI	236.6	245.2	249.8	256.4	263.1	269.1	276.7	280.4	281.9	286.9	292.3	292.9
8. Liquor Sales (T\$)	6410.	7696.	8951.	11280.	6845.	9397.	9396.	11365.	7789.	9057.	8917.	10464.

A resurgence in auto sales reported for the nation for the end of 1982 and beginning of 1983 is also reflected in the data for Wyoming. Auto and truck registrations during 4/82 remain 5.2 and 7.8 percent, respectively, below the levels recorded during 4/81, but 2.7 and 6.8 percent higher than 3/82. Historically, more cars and trucks are sold during the third quarter of a year, making an increase in 4/82 over 3/82 even more noteworthy.

The latest personal income data available are for 3/82. Aided by the 10 percent personal income tax of July, 1982 U.S. personal, as well as disposable income between 3/81 and 3/82 was 2.7 percentage points greater than the increase in consumer prices during that time. Partial data for 4/82 U.S. disposable income indicate a slowdown in income growth. In light of actual price deflation during 4/82 and the widely held belief that the nationwide recession bottomed out then, a slowdown in income growth was to be expected.

Compared to other factors, the 10 percent cut in Federal income tax rates in July was not as significant in Wyoming as nationwide. Wyoming personal income during 4/82 was at its lowest level since 2/81, even without adjusting for inflation. In real terms, it's the lowest since 1/81.

As already suggested by the preceding paragraphs, the best economic news was for inflation. For the first time in a long while, the price level during the end month of the latest quarter was lower than at the end of the preceding quarter; actual price deflation of 1.1 percent on an annual basis. For the nation, the rate of inflation for all of 1982 was only 3.9 percent, and here in Wyoming the Department of Administrative and Fiscal Control measured an even lower rate of 2.47 percent for 1982.

Liquor sales always peak each year during the fourth quarter, and 1982 was no exception. However, with Wyoming's unemployment rate climbing to 8.0 percent during December, and thereby taking some of the cheer out of the holiday season, it is not surprising that 4/82 liquor sales ran 7.9 percent below sales of 4/81; a drop of more than 10 percent when inflation is taken into account.

¹Preliminary. An estimate based on trend and first two months of the quarter.

²Seasonally adjusted at annual rates.

³Number shown is for the last month of the quarter.

Sources: Series 1-2: R. L. Polk and Co. Motor Statistical Division. "National New Vehicle Registration Service." Published monthly.
 Series 3, 5: Business Week. Monthly personal income for states, regions and the U.S. Reported monthly.
 Series 4, 6, 7: U.S. Department of Commerce, Bureau of Economic Analysis. Survey of Current Business. Published monthly.
 Series 8: Wyoming Liquor Commission. Sales data are reported monthly to IPR.

Consumers

Wyoming Comparative Cost of Living Index* (January 5-7, 1983): Cheyenne = 100

City	Rank	All Items	Food	Housing	Transportation	Medical
Jackson	1	133.86	114.61	168.04	102.07	107.00
Gillette	2	116.55	113.94	130.34	104.09	107.24
Evanston	3	114.38	109.35	125.40	102.15	106.80
Casper	4	112.31	111.87	118.24	107.97	111.36
Pinedale	5	111.38	112.34	117.79	103.28	103.51
Sheridan	6	111.23	109.09	119.63	101.89	101.95
Rock Springs	7	111.06	112.70	116.44	105.96	101.86
Riverton	8	109.77	109.36	115.26	104.90	103.76
Sundance	9	108.51	111.59	113.80	98.71	104.64
Kemmerer	10	108.20	104.07	113.56	103.69	103.19
Thermopolis	11	106.60	119.53	105.87	100.66	96.40
Buffalo	12	105.75	108.85	107.17	98.82	106.31
Greybull	13	104.24	116.20	102.13	100.54	99.72
Laramie	14	104.22	104.11	108.76	99.25	97.27
Wheatland	15	104.13	116.60	100.30	102.58	100.98
Douglas	16	103.16	106.63	101.20	103.28	105.27
Rawlins	17	102.16	108.92	102.81	101.86	93.74
Newcastle	18	101.78	106.11	101.79	96.74	107.29
Cody	19	100.52	110.12	97.43	100.21	101.89
Cheyenne	20	100.00	100.00	100.00	100.00	100.00
Worland	21	98.75	111.08	91.91	99.34	104.52
Lusk	22	96.24	107.10	85.94	98.40	99.67
Torrington	23	92.06	100.34	81.27	97.87	99.96

Wyoming Comparative Cost of Living Index* (October 6-8, 1982): Cheyenne = 100

City	Rank	All Items	Food	Housing	Transportation	Medical
Jackson	1	129.96	117.57	156.63	99.81	105.40
Gillette	2	121.30	126.32	134.54	103.42	107.37
Pinedale	3	113.78	112.01	125.16	99.16	99.07
Evanston	4	113.60	111.30	121.37	103.72	107.89
Kemmerer	5	112.94	113.92	121.44	101.38	102.19
Casper	6	112.23	115.63	115.63	106.43	110.17
Rock Springs	7	110.30	113.88	113.37	104.48	105.15
Riverton	8	109.88	117.87	113.27	104.24	101.78
Thermopolis	9	109.67	125.05	109.95	100.39	96.45
Sheridan	10	108.70	117.23	110.67	100.35	100.17
Sundance	11	107.99	120.11	109.35	97.38	102.62
Newcastle	12	107.51	120.65	107.50	96.44	106.66
Cody	13	106.02	120.00	106.23	99.42	102.67
Worland	14	105.98	117.60	106.00	98.73	102.13
Buffalo	15	105.96	121.83	102.56	97.73	103.93
Laramie	16	104.48	107.93	107.64	98.82	92.76
Wheatland	17	103.64	116.80	98.07	101.91	97.86
Rawlins	18	102.02	109.17	102.59	100.50	92.52
Douglas	19	101.57	108.36	96.22	101.18	106.75
Cheyenne	20	100.00	100.00	100.00	100.00	100.00
Greybull	21	99.05	115.73	90.40	98.69	97.72
Torrington	22	96.51	103.02	91.74	95.85	97.53
Lusk	23	91.74	11.55	76.58	97.00	94.95

* Apparel and Recreation Indices not shown.

Source: Wyoming Department of Administration and Fiscal Control

Economic Base Multipliers for Wyoming Counties

In the last WQU, we printed 1980 and 1982 economic base multipliers calculated by the minimum requirements method. The calculation formula and some references were provided for readers interested in further investigating the reliability and meaning of Minimum Requirements' multipliers. The multipliers are listed again in this issue.

County	1980 ¹	1982 ²
Albany	1.70	1.71
Big Horn	1.56	1.56
Campbell	1.67	1.69
Carbon	1.65	1.67
Converse	1.58	1.60
Crook	1.45	1.45
Fremont	1.75	1.76
Goshen	1.56	1.56
Hot Springs	1.46	1.46
Johnson	1.48	1.48
Laramie	1.86	1.87
Lincoln	1.56	1.58
Natrona	1.87	1.89
Niobrara	1.38	1.38
Park	1.65	1.65
Platte	1.56	1.54
Sheridan	1.67	1.69
Sublette	1.43	1.43
Sweetwater	1.76	1.79
Teton	1.52	1.54
Uinta	1.57	1.66
Washakie	1.53	1.53
Weston	1.49	1.49

In this WQU issue examples of how such a multiplier could be used are developed.

Officially, a Minimum Requirement's multiplier is an employment multiplier, but it could be applied to income as well without a major error factor being introduced into subsequent analyses.

An economic base multiplier is the basis for translating a change in the economic base of a region, such as a county, into a total economic impact. A county's economic base consists of those businesses which bring in money from outside the county, such as through the export of goods, or by causing money earned elsewhere to be spent locally, such as would occur in the case of tourism.

For instance, if a new hotel employing 30 full-time people and generating payroll and profit of \$500,000 annually had located in Natrona County in 1982, the multiplier could tell us the total impact. In the case of a hotel, it would be very unlikely that a significant percentage of the hotel's income would come from Natrona County residents. By definition, local residents have a place to stay and would not need a local hotel. Thus, essentially 100 percent of the hotel's employment and income are part of the county's economic base. So the 30 hotel employees and \$500,000 income would create a total, or direct and indirect impact of 57 employees and \$945,000.

$$30 \times 1.89 = 56.7 \sim 57, \$500,000 \times 1.89 = \$945,000$$

The total change of 57 employees can be used in combination with information on households per worker and average household size to estimate the population impact, as well as demand for housing and various categories of public and private services.

The use of the multiplier is less clearcut in the case of a new enterprise like a grocery store or other less-than-100 percent basic enterprise. Only the portion of a grocery store's employment and income resulting from nonresident purchases increases the county's economic base has a multiplier effect. In many counties that portion may not differ significantly from zero, but in others like Teton County it may be quite large. For instance, if a new grocery store, employing 50 people and with payroll and profits of \$750,000 located in Teton County in 1982 and expects to make half of its annual sales to tourists, then its total impact is 64 employees and \$952,500 in personal income.

$$25 + 25(1.54) = 63.5 \sim \text{employees } \$375,000 + \$375,000(1.54) = \$952,500$$

Multipliers generally increase with population. Multipliers measure the degree to which a new dollar entering a local economy is respend locally. Counties with larger populations are able to provide a wider array of services locally than smaller counties. Thus they import a smaller portion of their total needs, and money in the local economy remains there longer, resulting in a larger multiplier effect for income generated by the county's economic base. Consequently, multipliers must be used with great care when a relatively large direct impact is being studied. If something like a large mine is opened in a sparsely populated county, its impact may increase the county's population by enough to significantly alter the multiplier. After sufficient time has elapsed for all indirect impacts to occur, the total impact could be much larger than forecast by the original multiplier. Thus, the multipliers are clearly more appropriate for projecting total impacts if the initial change in the economic base is relatively small. For example, using Laramie County's 1982 multiplier of 1.87 to predict the total impact of the MX missile deployment plan would certainly result in a substantial underestimate.

¹Population data based on 1980 Census

²Population data based on 1982 Department of Administrative and Fiscal Control estimates

Figure 13: Banking and Finance

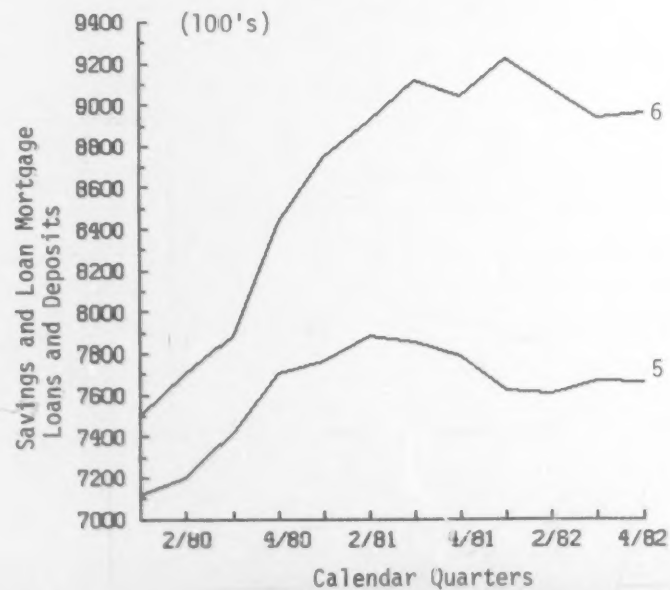
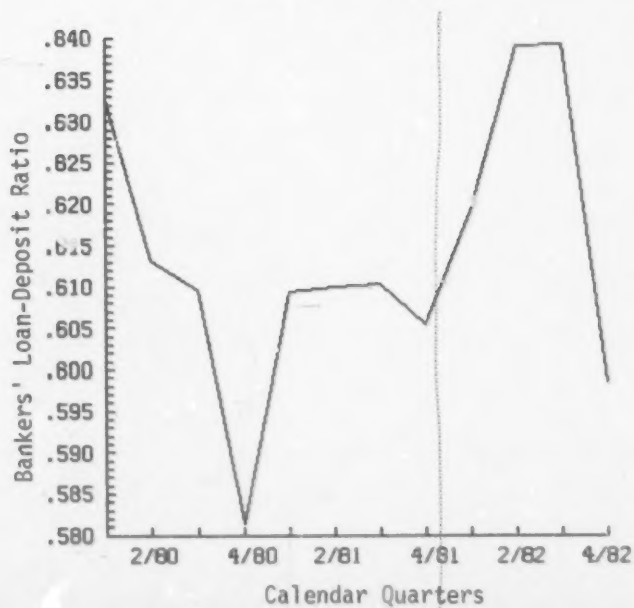
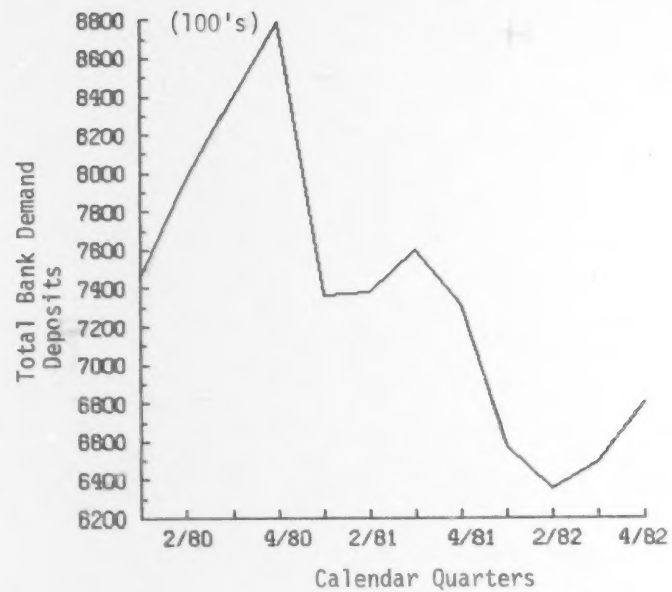
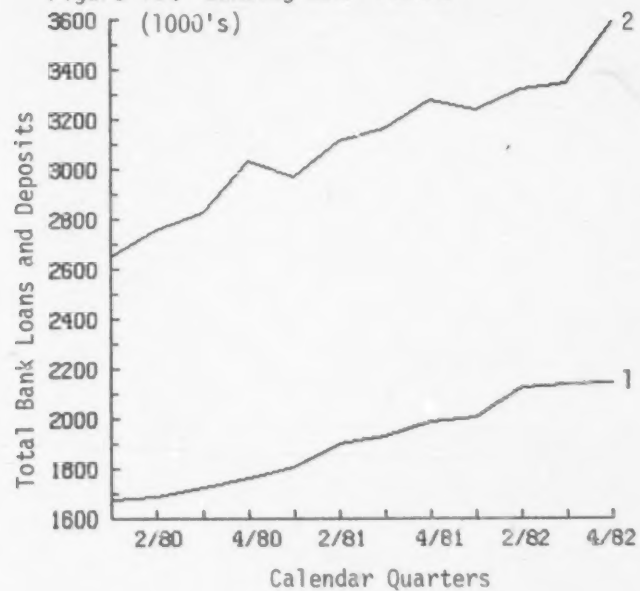


Table 13: Banking and Finance

Calendar Quarters	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82
1. Total Bank Loans (T\$)	1677881.	1689496.	1722916.	1764381.	1808747.	1898325.	1929706.	1984965.	2004233.	2123492.	2138495.	2147498.
2. Total Bank Deposits (T\$)	2651863.	2755238.	2826427.	3034647.	2968348.	3112270.	3161593.	3278504.	3237333.	3322621.	3345619.	3587554.
3. Total Bank Demand Deposits (T\$)	746467.	796838.	839111.	878444.	736161.	737837.	759658.	731429.	657349.	635856.	649332.	680332.
4. Bankers' Loan-Deposit Ratio	.633	.613	.610	.581	.609	.610	.610	.605	.619	.639	.639	.599
5. Savings and Loan ¹ Mortgage Loans (T\$)	711387.	719627.	741479.	770474.	776172.	788526.	785208.	778334.	762153.	760622.	766593.	765708.
6. Savings and Loan ¹ Deposits (T\$)	749815.	770186.	788448.	842740.	874533.	891585.	911587.	904212.	921642.	907758.	893087.	895889.

During the early weeks of 4/82, the Federal Reserve's discount rate and major commercial banks' prime lending rate fell substantially. They currently stand at 10.5 and 8.5 percent, respectively. Nevertheless, the ratio of low to no interest bank demand deposits to total bank deposits continued to shrink, from 22.3 percent in 4/81, to 19.4 in 3/82, to 19.0 percent during 4/82. Interest rates are down from earlier months of 1982, but historically still very high, so that bank customers continue to squeeze down demand deposit balances in favor of larger savings and time deposit balances. In fact, while total bank deposits grew 9.4 percent between 4/81 and 4/82 (nearly seven percentage points more than Wyoming's rate of inflation), bank demand deposits fell 7.0 percent. Bank lending grew only 8.2 percent over the same period. The decline in the bank loan-deposit ratio of 0.5 percentage points between 4/81 and 4/82 and 4.0 percentage points between 3/82 and 4/82 may reflect a movement of assets into government and corporate securities so as to lock in current interest rates, rather than suffer declining rates of return in the event that interest rates continue to fall.

Both 4/82 savings and loan mortgages and deposits are off slightly from a year ago. However, the outlook for savings and loan institutions appears to be very bright in 1983. Interest rate ceilings are being gradually relaxed, and the data for December, 1982 and early 1983 seem to indicate that home sales are picking up significantly.

¹Only members of the Federal Home Loan Bank Board are included.

Sources: Series 1-4: Wyoming State Bank Examiner Quarterly Report.

Series 5-6: Federal Home Loan Bank of Seattle, Monthly Report. Comparative statistical analysis of member institutions.

Figure 14: Gov.

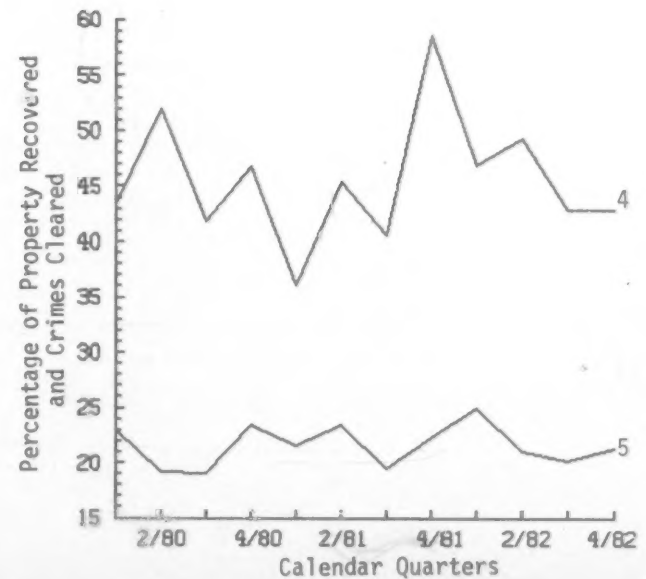
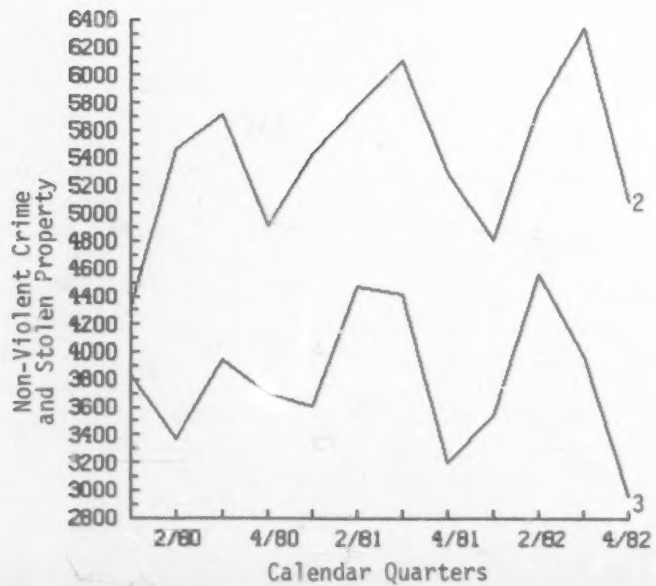
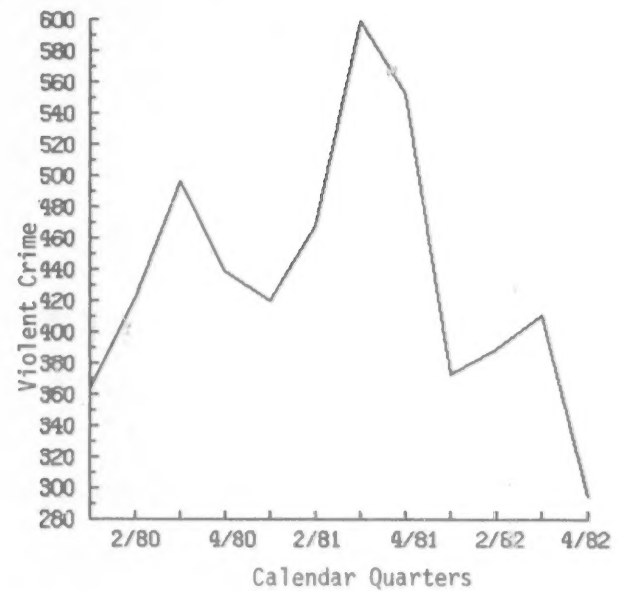
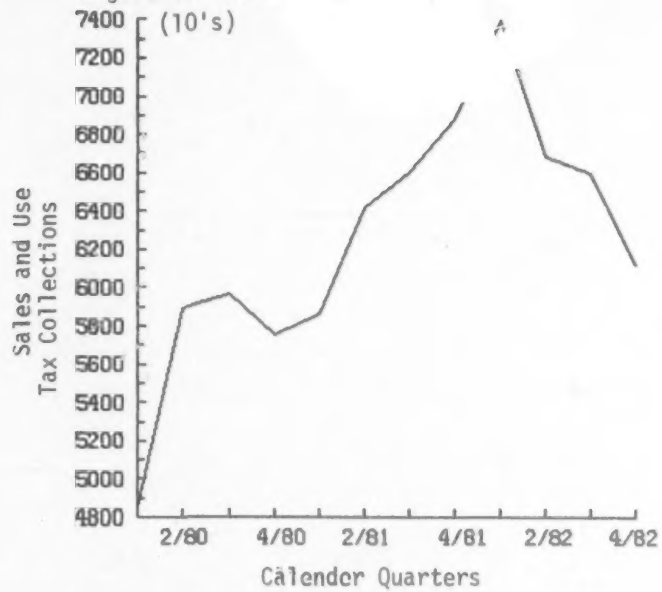


Table 14: Government

Calendar Quarters	1/80	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82
1. Sales and Use Tax												
Collections (M\$)	48511.	58928.	59626.	57547.	58605.	64136.	66012.	68766.	73830.	66759.	65903.	61208.
2. Violent Crime ¹	363.	421.	496.	439.	420.	468.	599.	553.	373.	389.	411.	295.
3. Nonviolent Crime ²	4331.	5464.	5710.	4916.	5430.	5783.	6111.	5299.	4811.	5778.	6346.	5093.
4. Stolen Property (T\$)	3837.	3374.	3945.	3696.	3601.	4471.	4421.	3201.	3541.	4562.	3982.	2963.
5. Stolen Property Recovery												
Rate	43.4	51.9	41.9	46.8	36.0	45.4	40.6	58.6	46.9	49.3	42.8	42.8
6. Percent of Crimes												
Cleared ³	23.0	19.1	19.0	23.4	21.6	23.4	19.5	22.3	24.9	21.0	20.1	21.3

After years of almost continuous increases from one quarter to the next, sales and use tax collections have fallen for three consecutive quarters. Collections during 4/82 were 17.1 percent lower than the historical peak achieved in 1/82. Projections of sales and use tax revenues for the state general fund during fiscal year 1983 have been revised downward by \$16 million, about 8.6 percent. The recession has also reduced the rate of growth of severance and property tax revenues levied on mining operations.

Compared to 3/82 and 4/81, violent crimes, non-violent crimes, and the public's dollar losses to thieves during the 4/82 are down significantly. Of course that is very welcome news. Much of the decrease is probably due to the fact that many energy development boom regions are past the peak of rapid growth. Slower, more controlled growth in those regions, along with the recession has made crime more profitable elsewhere. Consequently, many criminals have left to ply their trades in more populous regions of the nation. Hopefully, the current trend towards less crime can be maintained when better economic times return to Wyoming.

Also welcome news is the 1.2 percentage point increase in the crime clearance rate. Compared to the previous quarter, the recovery rate for stolen property during 4/82 remained unchanged.

Maps 11 and 12 (p. 45) indicate which counties depended relatively most heavily on government jobs to generate direct personal income during 1970 and 1980. The key to the right of each map indicates that despite a 41 percent increase in Wyoming's population between 1970 and 1980, increases in per capita income from government grew only slightly more rapidly than the rate of inflation. Thus, there was very little real growth on a per capita basis. State government in Cheyenne, the University of Wyoming in Laramie, and national parks and forests in northwest Wyoming are clearly reflected by both maps.

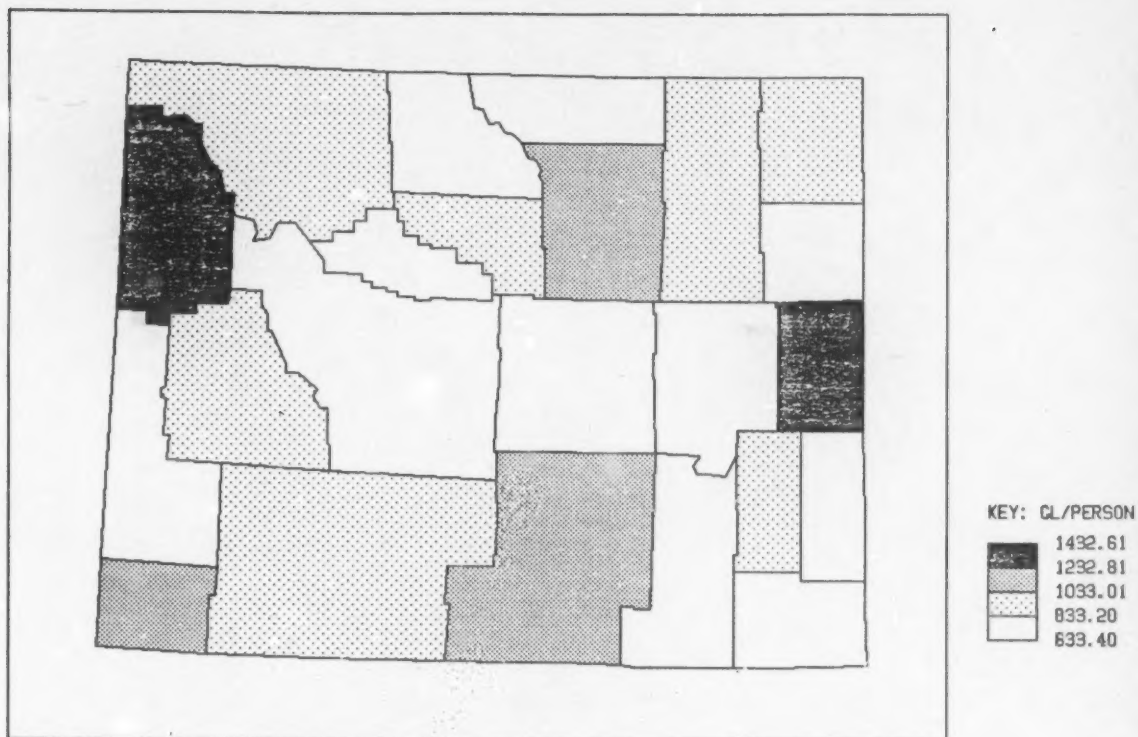
¹Murder, negligent homicide, forcible rape, robbery, aggravated assault.

²Burglary, larceny, auto theft.

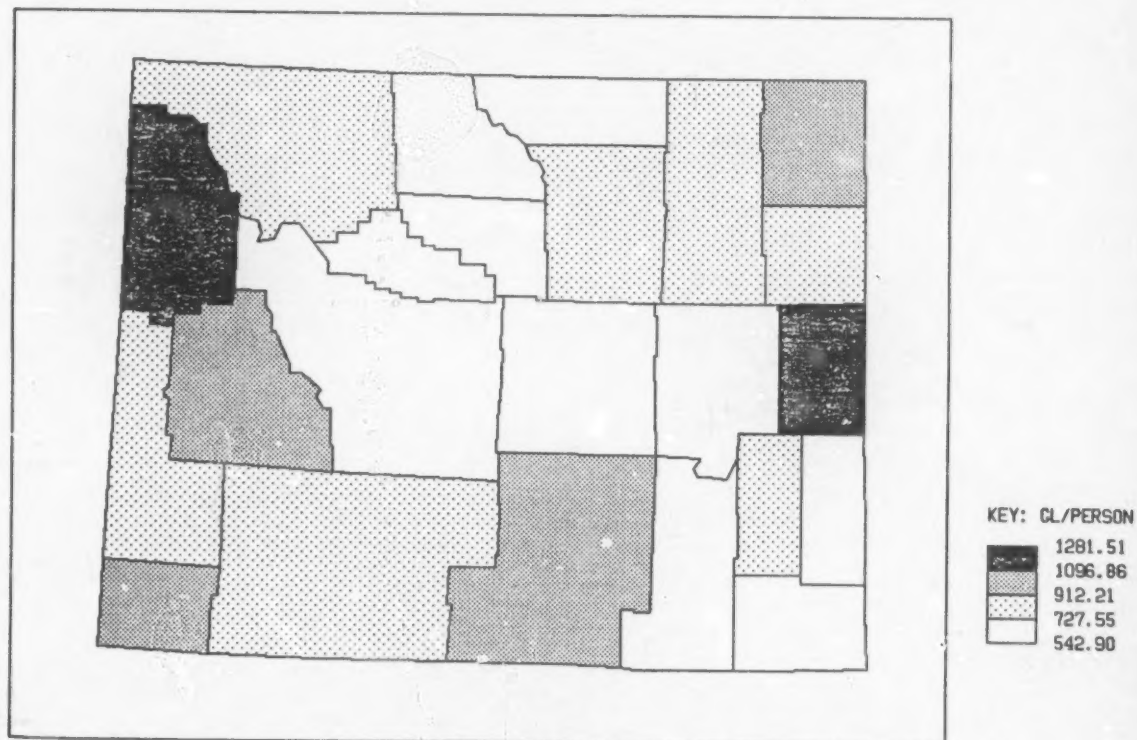
³Clearance of a crime indicates resolution of a complaint by arrest or other extraordinary means.

Sources: Series 1: Wyoming Department of Revenue and Taxation, Sales and Use Tax Division. "Net Collections by Business Class by County." Published monthly.

Series 2-6: Uniform Crime Reporting Center for Criminal Justice Research, Division of Criminal Identification, Office of the State Attorney General. "Crime in Wyoming." Published quarterly.



Map 13: GASOLINE GALLONAGE PER CAPITA IN 1980



Map 14: GASOLINE GALLONAGE PER CAPITA IN 1982

Gasoline Gallonage by County

Fiscal Years	1971 ¹	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Albany	17212122.	17777890.	18524147.	17468798.	17414673.	19881679.	20561702.	20647496.	19682829.	19041207.	17975950.	17750236.
Big Horn	6438944.	5808783.	6543232.	6623060.	6990765.	7393928.	7524672.	7524998.	8665803.	7557797.	7267764.	7549605.
Campbell	10679478.	10499490.	11012241.	10790139.	13269272.	14645430.	10792370.	16947424.	22377834.	21651192.	23039043.	24730243.
Carbon	18691035.	19341575.	21026771.	19822020.	21448175.	22832354.	23938259.	25466270.	26189756.	24818626.	24194994.	23730313.
Converse	5261926.	5397430.	5835814.	5814712.	6924648.	7727344.	9924054.	10322322.	12876605.	11492502.	10289510.	9858939.
Crook	4928868.	4261709.	4748110.	4361992.	4804869.	5108221.	5948941.	5719712.	5871170.	5321149.	5427036.	5731421.
Fremont	17883134.	19059676.	19873235.	20085029.	20946525.	22110420.	24430483.	27239830.	32265450.	31277276.	24415477.	24139477.
Goshen	7871972.	7773774.	8651187.	8218136.	8416773.	8642165.	9021168.	8667756.	9697555.	8465940.	8052113.	8016687.
Hot Springs	3254048.	3403417.	3672851.	3412146.	3413610.	4026828.	3455950.	3236292.	3714305.	3889030.	3860137.	3957830.
Johnson	5315020.	5431724.	5890905.	5477644.	6249676.	6946185.	7207827.	7416654.	7539377.	7985409.	7008827.	6193367.
Laramie	33886661.	35303278.	38529017.	37847583.	37974040.	33762476.	43440375.	48522411.	39019272.	43480476.	41480235.	41942691.
Lincoln	7767837.	7213070.	7314684.	7735477.	7788689.	8509923.	9603338.	10150269.	10148861.	9786901.	10414209.	11389239.
Natrona	30834608.	31383704.	33207146.	33438557.	37644064.	40038670.	45373841.	47911204.	54684354.	47364775.	45592396.	45670535.
Niobrara	3419611.	3831625.	3895951.	3813290.	3677869.	3961640.	4046676.	3833422.	4208433.	3694457.	3943862.	3760247.
Park	14899589.	14939337.	15663866.	16197059.	16157099.	16010801.	17686265.	17136923.	17835596.	18685092.	16060736.	17195314.
Platte	6579122.	7074538.	7235504.	7066349.	7784386.	8254436.	8147594.	8663522.	11409936.	10575805.	9549840.	8054305.
Sheridan	10739419.	11149084.	11684842.	11313483.	12440542.	15062724.	16058655.	17892857.	18923967.	18172997.	15403513.	14688062.
Sublette	3688078.	3804518.	4712794.	4504815.	3952494.	4198127.	4490383.	4736530.	4798465.	4022081.	4569166.	4596857.
Sweetwater	20294989.	22646390.	26730550.	29318097.	32478183.	32780623.	34240073.	38549713.	45287061.	40167306.	41503253.	38885971.
Teton	8687257.	9541581.	13609571.	9929430.	10183306.	12013872.	12865105.	13811484.	14642737.	13327979.	11817547.	12977837.
Uinta	8619321.	9040273.	10216688.	9552623.	10554704.	10673275.	11131767.	12218349.	14396910.	15378053.	19959370.	22305946.
Washakie	5398149.	4956516.	5471154.	5571042.	5910912.	6348372.	6995213.	6397177.	8514465.	8209423.	6525497.	7034287.
Weston	4311096.	4437972.	4449653.	4320140.	4240433.	5471073.	4835468.	5373358.	5705560.	4869690.	5028442.	5376883.
Wyoming	256662284.	264077354.	288499913.	282681621.	300665707.	316400566.	341720179.	368385973.	398456301.	379235163.	363378917.	365536291.

¹ Figures for fiscal year 1971 include an estimate. Due to an inconsistency in the format that gasoline gallonage data was published, the month of July, 1979 was estimated based upon a percentage of a yearly total.

NOTE: Gasoline tax was 7¢ per gallon for the period from fiscal year 1971 to March 1, 1976, at which time an 8¢ per gallon tax became effective.

Sales and Use Tax Collections by County

Fiscal Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Albany	1608491.	1735138.	1925823.	2058779.	2227478.	2427340.	3000783.	3382182.	4090480.	3174758.	4877631.	5585492.	5886679.
Big Horn	588536.	621321.	702977.	799071.	908712.	1088284.	1192320.	1289474.	1468654.	1260042.	1834375.	2110631.	2372989.
Campbell	2317798.	2083896.	1919239.	2200689.	2668182.	4739975.	5240779.	8224673.	11933643.	8576491.	14167548.	20513629.	25949524.
Carbon	1089448.	1308818.	1554528.	1856609.	2140551.	3299427.	3470590.	4533693.	6230708.	5531253.	8573894.	10099743.	9852586.
Converse	418237.	483925.	503740.	558965.	719473.	1008556.	1593737.	2323005.	2947155.	10537358.	4117827.	4913146.	5780495.
Crook	278888.	276293.	285619.	331505.	377431.	442347.	569334.	626689.	795358.	816409.	1172773.	1476321.	2181116.
Fremont	1917181.	2091853.	2290387.	2650013.	2948135.	3673263.	4562969.	5739204.	7332615.	6521495.	9615481.	11250954.	11739879.
Goshen	678689.	750496.	853178.	1000157.	1174064.	1363565.	1572721.	1581807.	1767552.	1644256.	2483066.	2353621.	2344473.
Hot Springs	375286.	406169.	478199.	519859.	581423.	753293.	849257.	1028561.	1300389.	1319043.	1837829.	2330544.	2502533.
Johnson	423696.	453565.	456723.	517683.	577770.	696710.	960033.	935051.	1121128.	1121259.	1643115.	1906343.	2283995.
Laramie	3693361.	4067707.	4691907.	5650345.	6167302.	6998607.	7976280.	8684210.	11599854.	10329659.	15473628.	17586838.	18678927.
Lincoln	510965.	568464.	621588.	673304.	768244.	956666.	1095679.	1532159.	1826740.	1624964.	2756329.	4127658.	4806112.
Natrona	6085273.	6458131.	7209274.	8273639.	10256149.	32087139.	19483113.	23119986.	30354331.	22382107.	40667061.	52115392.	59217892.
Niobrara	196426.	209637.	231368.	244818.	275711.	311667.	353102.	407415.	516739.	419072.	658287.	784348.	825221.
Park	1695607.	1710118.	1953768.	2274666.	2564564.	3257151.	3509807.	4101623.	4767986.	3654371.	5493072.	7905014.	8226134.
Platte	417808.	445593.	491456.	567185.	681032.	798246.	976364.	1401470.	3702927.	3621831.	3484445.	2816807.	2273240.
Sheridan	1336660.	1480109.	1677018.	1843799.	2055786.	2433851.	2972476.	3420491.	4390251.	3959335.	6113433.	7038540.	7143326.
Sublette	323855.	303788.	355378.	369100.	432879.	524536.	610191.	651476.	861722.	779079.	1261160.	1524367.	1909261.
Sweetwater	1691924.	1907745.	2456624.	4550818.	7503535.	9840669.	9834891.	11979899.	13325926.	9638867.	18231737.	27219448.	29059081.
Teton	1025390.	1173998.	1324002.	1537236.	1828389.	2517133.	2989719.	3485485.	4310694.	3545289.	4565005.	5896823.	6627874.
Uinta	659814.	567843.	566902.	638096.	732575.	945463.	1190183.	1786089.	2479222.	2102074.	4677506.	8800137.	15535851.
Washakie	746178.	791350.	887385.	991911.	1107965.	1330430.	1611228.	1778066.	2090939.	1585121.	2590879.	3509854.	3141839.
Weston	551194.	509228.	531000.	586616.	686041.	912505.	1371913.	1562211.	1787897.	1494958.	2084683.	28445505.	3340066.
Wyoming	31494707.	34363062.	37687448.	44929272.	55265770.	76200841.	88399589.	106813174.	137906932.	165107953.	196884131.	239913704.	275366889.

State Board of Equalization Property Valuations by County

Fiscal Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Albany	15523434.	16668340.	18205962.	19188766.	19627204.	20163520.	20595519.	20913219.	21065374.	22663460.	26364084.	29227975.	33381680.
Big Horn	21596285.	21375876.	22266798.	23218320.	25259306.	39928127.	58331403.	56773420.	57009938.	62300048.	74039456.	112993054.	182925349.
Campbell	100698296.	126612122.	121557030.	117621369.	158420299.	285913179.	259638511.	296846115.	413452321.	494361467.	587257381.	861956780.	1260698156.
Carbon	26745740.	32447127.	37157756.	46495625.	56762452.	72011461.	115895318.	136583122.	175107480.	229522906.	268110892.	359005431.	533758387.
Converse	36464078.	43814092.	49334725.	51089558.	61478884.	105661126.	163386167.	149646905.	172581192.	186066391.	217489067.	318007957.	344708207.
Crook	14793529.	14866041.	14199876.	13509831.	17429783.	26989627.	27801039.	32115570.	30469373.	30799412.	41377264.	69399475.	97942471.
Fremont	56943088.	62371906.	61791381.	67446144.	67341091.	80440912.	84287532.	109882384.	151856368.	148325685.	195901476.	251832946.	390503729.
Goshen	5737923.	5184076.	5213664.	5371176.	5424327.	5621714.	5656536.	5886900.	5806083.	5901272.	9078390.	9103428.	9639228.
Hot Springs	32922256.	31081312.	30919679.	29101717.	34238819.	57588779.	61547376.	73572201.	80432236.	87997307.	94435551.	213152039.	285883643.
Johnson	16960968.	16539371.	16659554.	15126855.	16026220.	23388740.	29736784.	33236794.	33681626.	37349778.	47574675.	76252731.	98531331.
Laramie	20547725.	21068459.	22312768.	23822898.	25286022.	27866478.	30239528.	32149570.	37526087.	38778821.	46235114.	54394903.	62165614.
Lincoln	28878734.	35106172.	39031440.	42792971.	51765248.	62110167.	66038862.	88508219.	100290874.	110354592.	126265314.	167448517.	211121949.
Natrona	64172460.	60934801.	63803824.	63210135.	90907611.	123553512.	95632985.	87905794.	86614212.	96033234.	117170659.	164910287.	298357257.
Niobrara	4372124.	3850241.	3907328.	4150428.	4351776.	6366696.	8234129.	8812563.	9346507.	11573231.	27145414.	43225832.	50929939.
Park	96022231.	90711244.	94531997.	88462100.	97606851.	150563075.	176144387.	179800396.	178852377.	193212612.	231536077.	459112244.	692135300.
Platte	9010077.	8813054.	9177235.	9597220.	9365929.	11188524.	12029216.	17580845.	47514112.	75548936.	153985369.	150679583.	157464443.
Sheridan	7131492.	10279919.	11292584.	8803947.	7735023.	11379376.	13205169.	14295522.	38908675.	49754416.	67454097.	81082483.	72531610.
Sublette	24802904.	24770018.	25641149.	24635682.	30319903.	39720631.	46346597.	47019930.	63034060.	62604848.	77502997.	100355576.	129801981.
Sweetwater	75633575.	81930433.	86118913.	93507102.	127902321.	201224504.	266028106.	373847509.	449571908.	498380422.	650321049.	907243515.	1111193603.
Teton	1437319.	1776961.	2108081.	2065539.	2250526.	3064263.	3467819.	3685332.	4221156.	4813289.	5344029.	6428787.	7208112.
Uinta	11358225.	11684653.	12105493.	12277946.	13080230.	13529262.	14130579.	14521113.	20930270.	38109194.	107306209.	205658318.	376997046.
Washakie	11120403.	10783794.	10282454.	10989666.	11876361.	15575700.	15906362.	17776756.	20102756.	23112119.	26613114.	61187869.	82878559.
Weston	14325130.	15552117.	16690931.	16507332.	18238393.	26357768.	29640103.	32080509.	32959872.	38223144.	55235246.	75678474.	99966905.
Wyoming	697197996.	748222129.	774300713.	788992418.	952694579.	1410207141.	1603920027.	1833440688.	2231334857.	2545786584.	3253742924.	4778338204.	6590724499.

Locally Assessed Valuation by County

Fiscal Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Albany	33047558.	33543251.	35864591.	36820486.	38795845.	36343346.	44113039.	46909255.	49753451.	54595960.	56642475.	60099472.	63519068.
Big Horn	18099737.	18132429.	18038131.	18529141.	19964120.	18869665.	21221753.	22355875.	22121398.	23747938.	24986354.	27272012.	32319422.
Campbell	24623651.	27627552.	29196171.	31087581.	34585438.	36436176.	45101209.	59759177.	80808838.	101812427.	112471782.	136715187.	159912309.
Carbon	31724204.	33319109.	37826299.	39470638.	41898200.	41851844.	48650653.	52047682.	55752777.	64018028.	71263655.	80578920.	80481220.
Converse	16291119.	16834206.	19176312.	21147003.	23425795.	22739421.	28116080.	30877511.	37135443.	41586053.	46784472.	51723401.	53964075.
Crook	13178793.	13376483.	14313178.	15991389.	17588744.	15815846.	18599035.	18974489.	16556114.	18919265.	20239818.	21220439.	22098803.
Fremont	51157769.	52108599.	53431861.	54692825.	57769252.	56412839.	60998982.	65432438.	68312801.	81778341.	91247203.	98027349.	101247388.
Goshen	24502869.	24711990.	25706134.	27149659.	29335296.	27628907.	32090254.	33399185.	31550613.	34523792.	36148399.	37706935.	40210228.
Hot Springs	10228610.	10203580.	10473522.	10823632.	11633023.	10900274.	12586095.	13001142.	12310972.	13112809.	14624882.	17374404.	18036951.
Johnson	16642595.	16844720.	17531450.	18790507.	20371665.	19568455.	25017032.	25766655.	23110630.	28566484.	30643666.	34437227.	35988825.
Laramie	84879170.	85913812.	88088329.	92068281.	97598224.	103576951.	117189460.	123563202.	128172685.	139948349.	149024243.	151552952.	163552636.
Lincoln	15653474.	15955340.	16585540.	17714659.	20046669.	20272312.	24550006.	27548409.	26550242.	28314285.	30037422.	33028978.	36781028.
Natrona	81094089.	84398449.	84892416.	84245770.	88940647.	89894072.	112092178.	124879576.	131807211.	150223052.	163970817.	179214058.	193305500.
Niobrara	11364137.	11566741.	12303999.	13638942.	14969058.	13052880.	14316920.	14753381.	13310974.	13906413.	14442289.	15696783.	16421161.
Park	33112861.	33622044.	34508505.	35819171.	38572937.	38060012.	43979918.	46800063.	48549156.	52805239.	59142566.	64717421.	68110455.
Platte	14230835.	14289913.	15267925.	16390923.	18089454.	16949514.	19325484.	21096588.	19875079.	22220046.	23385838.	24784679.	25229928.
Sheridan	31371656.	31888663.	33137711.	35331972.	37903184.	35629990.	41052524.	43433051.	45822267.	54365729.	57297381.	61510936.	62626497.
Sublette	12906781.	13302666.	13524509.	14405718.	16060557.	14219283.	15876243.	17114264.	15265429.	17547823.	18923914.	22785553.	25943553.
Sweetwater	38081612.	39237247.	40075230.	47486939.	58223164.	71461924.	86336196.	96128068.	103487495.	115075791.	126068209.	147670785.	166591282.
Teton	16170614.	16918251.	18409568.	20479095.	22396801.	22795218.	25594776.	31664467.	33081478.	35086191.	42515673.	45402212.	47855020.
Uinta	12086624.	12216173.	12695466.	13188508.	14396993.	13860273.	15028640.	17049325.	17677047.	19940248.	24950580.	33962654.	52311478.
Washakie	14948968.	14991781.	15218094.	15661823.	16509574.	16142235.	17927882.	19945860.	22099279.	25674523.	26888157.	29834003.	31306158.
Weston	15280341.	15228812.	15390007.	16159473.	17176527.	15767795.	17498096.	18276587.	17332045.	19071160.	19691080.	22636213.	23603362.
Wyoming	620678067.	636231811.	661654948.	697094135.	756251167.	758249232.	885462455.	970776250.	1020443424.	1156839946.	1261390875.	1397952573.	1521416347.

Distribution of Cigarette Tax to Cities, Towns, and Counties*

Fiscal Years	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Albany	127861.	129320.	136095.	143685.	134517.	137216.	145606.	152344.	145700.	142818.	152145.	146686.	147202.
Big Horn	43447.	46478.	46768.	52056.	59903.	52474.	56592.	56802.	56157.	58272.	59770.	61513.	64038.
Campbell	95612.	92086.	83974.	100800.	96064.	118254.	137295.	163073.	187870.	191419.	213895.	245719.	282397.
Carbon	87616.	97390.	108183.	110086.	135006.	130451.	137276.	153035.	166314.	175519.	195530.	198443.	180603.
Converse	30704.	39354.	37389.	42204.	45601.	59179.	71590.	76636.	86240.	95179.	101585.	103190.	104758.
Crook	24033.	24619.	24347.	26733.	25758.	30242.	34260.	36633.	35221.	34092.	35553.	36493.	36623.
Fremont	152572.	165738.	172767.	191756.	185217.	200420.	181418.	214245.	234670.	254287.	253878.	256637.	243048.
Goshen	58396.	61926.	68586.	79133.	73807.	82275.	86134.	84787.	85518.	84136.	86018.	85443.	84371.
Hot Springs	30024.	32670.	31630.	34415.	33587.	33864.	37747.	36195.	35932.	39469.	39313.	40211.	41028.
Johnson	35036.	34753.	32188.	34643.	34275.	35320.	42430.	40658.	43515.	44177.	42787.	45488.	46610.
Laramie	274680.	282948.	301174.	361286.	357095.	371453.	389974.	389479.	409815.	419705.	444986.	444119.	427899.
Lincoln	34455.	39718.	38941.	45025.	51691.	41880.	47584.	49221.	50572.	59067.	68234.	72163.	79577.
Natrona	377051.	396222.	411089.	454318.	424048.	437110.	475119.	490442.	527855.	557211.	596425.	614225.	620961.
Niobrara	16790.	17223.	18794.	20807.	19317.	19641.	22129.	21985.	21196.	21725.	22147.	24179.	22674.
Park	105030.	105760.	113933.	127026.	123300.	124686.	138951.	137246.	139156.	145221.	136129.	140370.	149333.
Platte	38981.	41366.	42777.	49525.	49102.	52547.	58659.	55507.	65326.	84546.	95659.	85188.	70871.
Sheridan	112230.	118510.	127366.	135244.	136831.	142128.	158483.	177003.	182140.	182915.	186731.	183383.	182208.
Sublette	21632.	22534.	23565.	20598.	22356.	26374.	25824.	21797.	31132.	37474.	52847.	49200.	58489.
Sweetwater	110965.	122856.	145077.	181439.	235827.	263158.	263317.	255372.	282362.	304149.	327056.	361615.	369963.
Teton	49061.	50517.	56083.	62857.	60369.	63490.	66698.	76295.	73245.	79055.	80844.	84661.	90350.
Uinta	31979.	35140.	42354.	47258.	47348.	65414.	54803.	60050.	74978.	86067.	112158.	139917.	160007.
Washakie	48458.	49526.	48616.	51056.	48904.	48712.	56081.	56595.	57158.	59945.	59778.	61630.	64638.
Weston	43041.	40794.	42975.	46121.	43924.	45183.	45610.	53915.	52088.	55308.	50949.	53081.	58256.
Wyoming	1949653.	2047395.	2154581.	2418061.	2436332.	2581473.	2754790.	2859314.	3044161.	3212056.	3414416.	3535384.	3585677.

*Totals subject to rounding error.

A MESSAGE FOR OUR READERS

IPR's Computerized, On-Line Database and How to Access It

In response to a question in IPR's recent survey of WQU readers, many respondents requested additional information about our data system. Therefore, the following paragraphs provide a brief description of the database, and then instructions on how to gain access to it.

One of the resources which makes the WQU possible is IPR's on-line database. However, the data maintained in the computer is much more extensive than is required to publish the WQU. While only the most recent 12 periods, either quarters or years, are presented in each update, some of the data series in the computer extend over 30 years. This extensive, on-line database also exists to serve as a referral and research resource.

It should be noted that except for the Utilities and Building Permit data collected directly by IPR, the data series in the system could be obtained from its source by anyone. Thus, the database is valuable not because of the uniqueness of the data available. The database is valuable because large amounts of relevant data are available to a large number of users, at low cost, and often on a moments notice. By computerizing and centralizing data files of varied type and origin, the arduous task of searching for, acquiring, and perhaps keypunching massive amounts of data has been greatly reduced.

IPR has made every effort to include in the system all regularly updated, general interest data sets pertaining to Wyoming. Many data series are now available for counties and the effort to add more county-level data to the system is ongoing. The data are organized according to the 13 data sections appearing either regularly or intermittently in the WQU. Data comparable to that appearing in a particular county profile exists within the data base for all counties.

At this time, resource constraints limit direct, interactive use of the database to students, faculty, staff, and administrators of the University of Wyoming and the state's community colleges. However, IPR is prepared to handle modest requests for data. Requests can best be handled by telephone (307-766-5141). Data can be mailed to the requestor either on paper, or in the form of computer cards (a small charge may be necessary for large requests to cover the cost of materials and postage).

Those affiliated with the university or a community college are encouraged to request a user's manual for interactive use of the system. Those already using the system should note the following change. Formerly, this command:

GET, PROCFIL/UN=CDRO3AD

was the first step after signing on to access the data. IPR's files have recently been moved to new accounts, so that now the proper first command is

GET, PROCFIL/UN=RDRO3AD

a change of one letter only from previously.

Changes to Follow the Questionnaire Responses

Questionnaires were mailed out in mid-November, 1982 to the approximately 1500 addresses on our mailing list. Two hundred and five questionnaires were returned, representing input from approximately 832 readers. The responses were tabulated and analyzed in January, with a number of decisions being made about changes that should be implemented in future editions. Unfortunately, many good ideas cannot be acted upon because of their specialized nature, or because of resource constraints. All data collection and analysis for the WQU is conducted by two part-time people.

Several planned changes are already in evidence in this issue. Most obvious is the change in its physical appearance, and the format. There are no more staples to pull out to get the WQU open. Inside, sections have been moved and more explicitly separated from each other. County profiles will follow the Wyoming Scene section. The units code has been replaced by mnemonic abbreviations, reducing the number of times the reader must flip to another page to find out the units of a particular data series. The bibliography has been eliminated in favor of citations of sources beneath the narrative of each table.

Additional changes are still in the planning stages, and will hopefully be ready to go for our next issue. The number and content of county profiles will expand. Four counties (Hot Springs, Park, Sublette, and Sweetwater) will be covered in the next WQU. Another four counties will be covered in the issue to follow that one. Suggestions from readers as to which counties should be among the four covered next September will be welcomed. The four must be chosen from among Albany, Campbell, Carbon, Crook, Johnson, Sheridan, Washakie, and Weston, because only those eight counties will not have appeared in the WQU at least once by then. Among the other planned changes is the revision of our graphics. A wider variety of graphic aides will appear, mostly in a separate section from data tables. A new graphic aides section is likely to include a modest effort at some near-term economic forecasting.

We continue to urge our readers to contact us whenever they have an idea that could help us improve our services.

Format

For data available at least quarterly, the last 12 quarters are printed in WQU. In this edition, published series begin with the 1st quarter of 1980, and end with the 4th quarter of 1982. For other data series (primarily annual), the most recent observations, up to 12, are published in WQU. Most annual data series will reappear in WQU only when updated, or about every fourth issue. Quarters are calendar quarters. For example, the 3rd quarter is composed of July, August, and September. In the table headings and narratives, a particular quarter will be indicated by notation such as 2/80 (2nd quarter, 1980), 1/80 (1st quarter, 1980), and so on.

Beside each data series name is an abbreviation in parentheses. The abbreviation indicates the units (such as dollars, tons, feet, miles, etc.) of the data. The key to the units abbreviations is below.

Throughout WQU, all data are for the state unless otherwise stated. The most recent year's data should be viewed as preliminary, due to revisions. The acronym "INA" signifies that information is not available. Some graphics are used to illustrate trends. When more than one trend line appears on a graph, the line will be labeled with a number which matches the number of a data series on the accompanying table.

The reader should be attentive to the footnotes at the bottom of pages, particularly those accompanying a data table. The footnotes help the reader to properly interpret the data, and they also indicate when more detailed (by subject or by area) data than that which is shown is available from IPR. A list of sources follows the footnotes.

Key to Units Abbreviations

MBF - Thousand Board Feet	GL - Gallons
TKWH - Thousand Kilowatt Hours	TCF - Thousands of Cubic Feet
\$ - Dollars	KWH - Kilowatt Hours
M\$ - Millions of Dollars	TGL - Thousands of Gallons
B\$ - Billions of Dollars	HBBL - Hundreds of Barrels
T\$ - Thousands of Dollars	
H\$ - Hundreds of Dollars	
ST - Short Tons	
TST - Thousands of Short Tons	
MCFD - Million Cubic Feet Per Day	
TBPD - Thousands of Barrels Per Day	

RECENTLY PUBLISHED WYOMING RELATED RESEARCH REPORTS

THE WYOMING ECONOMY: HISTORICAL TRENDS AND PROJECTIONS by Shelby Gerking and John Merrifield Available now	No Charge
ANALYSIS OF THE LONG-TERM IMPACTS AND BENEFITS OF GRAND TETON NATIONAL PARK ON THE ECONOMY OF TETON COUNTY, WYOMING by John Merrifield and Shelby Gerking Available now	\$5.00*
EXPORTATION OF STATE AND LOCAL TAXES: A COMPARATIVE ANALYSIS by Shelby Gerking, William Morgan and John Mutti Available now	\$5.00*
A STUDY OF EMPLOYER PREFERRED SKILLS AMONG GRADUATING BUSINESS STUDENTS OF THE UNIVERSITY OF WYOMING by Gary Benson Available now	No Charge
CHANGING FEDERAL-STATE RELATIONS IN WATER RESOURCE PLANNING: THE CASE OF WYOMING by R. McGregor Cawley and Charles Davis Available now	

*Prices reflect reproduction costs only.

HOW TO ORDER

Please mail your order together with payment (if necessary) to:

INSTITUTE FOR POLICY RESEARCH
Box 3925, University Station
Laramie, WY 82071
ATTN: Beth Daniels

Thank You

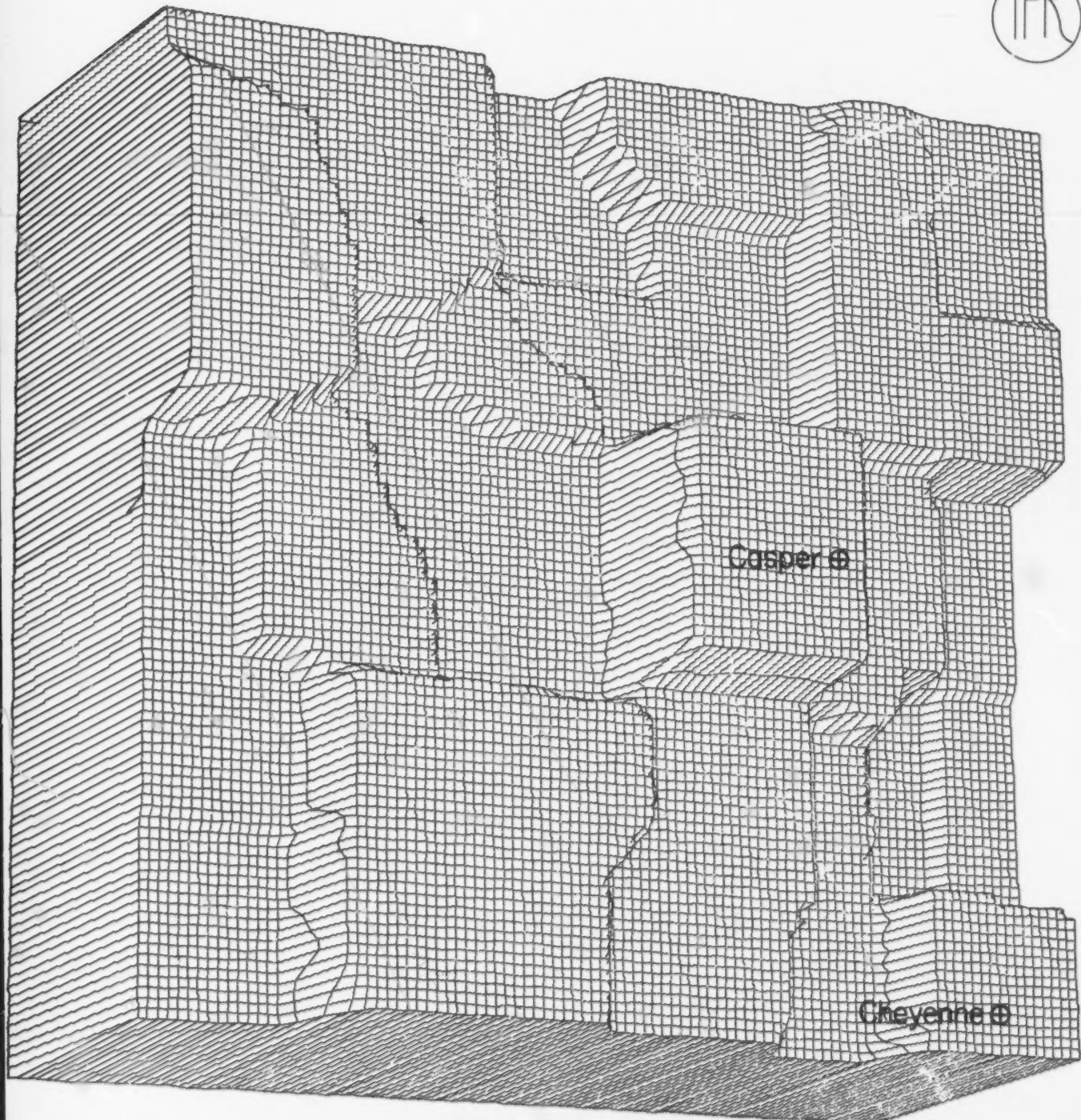
8/5/83 U9350-2

2

Summer 1983

Vol. 2, No. 4

Wyoming Quarterly Update



1981 County Per Capita Personal Income



CRIS

Census Retrieval Information Service

P.O. Box 3925
Laramie, WY 82071
(307) 766-5141

Room 302
Emerson Building
Cheyenne, WY 82002
(307) 777-7504

U.S. Census information for Wyoming is handled by the Census Retrieval and Information Service (CRIS). CRIS issues printed reports of Wyoming Census data as well as handling specific requests. Much of the population and housing data from the 1980 Census is now available.

CRIS reports now available:

PRICE

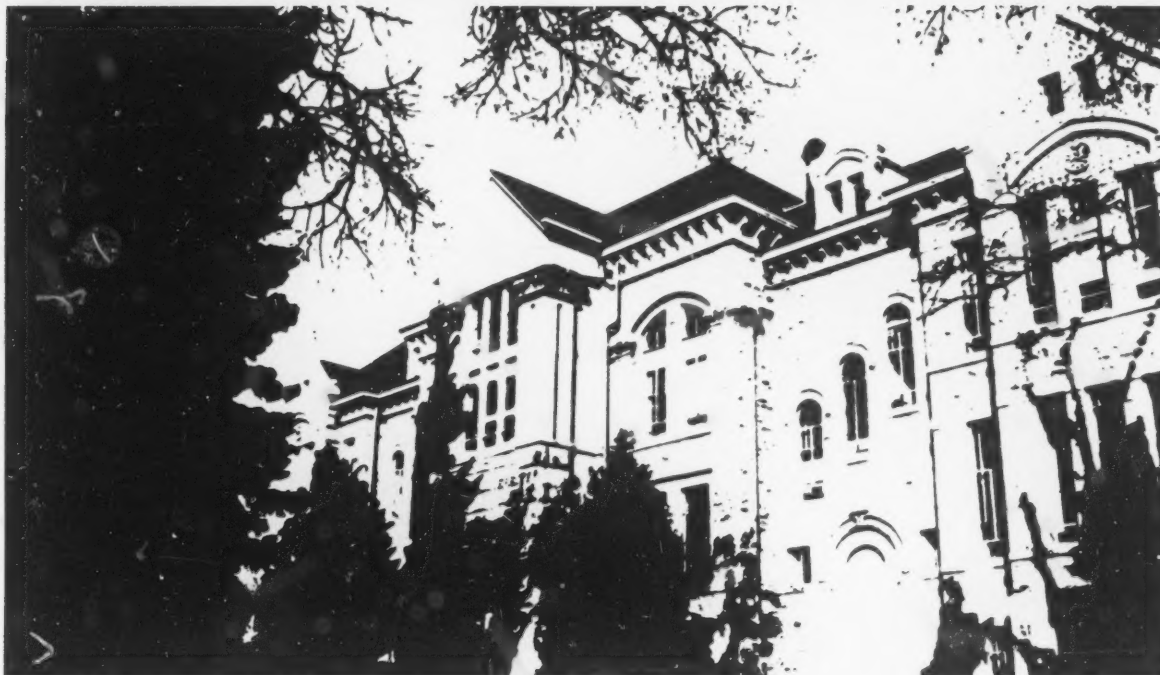
- | | | |
|----------|--|-----------|
| #82-9-2: | <u>STF3</u> , September 1982, 13 pages. List of tables available from STF3 tape. Partial labor force and income data for state, counties, and cities. | No Charge |
| #82-8: | <u>Age Distribution in Wyoming, 1980</u> , August 1982, 120 pages. Analysis of age profiles in 5-year brackets.
Wyoming: Comparison with USA and with 1970. Indications of net in-migration by age. Prediction of 1990 peak at ages 30-34.
Counties: Maps of age distribution. Graphs of age profiles for each county.
Cities: Age profile for each city. | No Charge |
| #5: | <u>STF1</u> , October 1981, 54 pages. 100% count data, 1980 population and housing: state, counties and cities. | No Charge |
| #6: | <u>Laramie People Patterns</u> , January 1982, 11 pages. Minority distribution in Laramie by zoning and by age of neighborhood. | No Charge |
| #83-5: | Labor in Wyoming: 1980 | No Charge |

CRIS is a cooperative service provided by the Institute for Policy Research, University of Wyoming, and the Research and Statistics Division, Wyoming Department of Administration and Fiscal Control.

We are looking forward to assisting you in the future.

Judy Denison and G. Fred Doll
Institute for Policy Research
University of Wyoming

Phil Kiner
Research and Statistics Division
Department of Administration and
Fiscal Control



INTRODUCTION

The Institute for Policy Research (IPR) on the University of Wyoming campus at Laramie was established in 1976, replacing the University's Division of Business and Economic Research. IPR's primary aim is to initiate and supervise a broad program of research in such fields as business, economics, and the social sciences. Such research helps to draw into sharp focus significant policy questions affecting Wyoming and the nation. Close contacts among industry representatives, governmental agencies, and UW faculty members help ensure that research efforts undertaken for IPR clients address research problems of mutual interest.

ADMINISTRATIVE STRUCTURE

Administratively, IPR is located under the UW Vice-President for Research and Graduate Studies. Thus, IPR interacts directly with all UW faculty who wish to engage in research pertaining to major policy questions. Through its faculty advisory committee, IPR maintains direct links with researchers in the departments of economics, political science, geography, sociology, statistics, social work, anthropology, recreation and parks administration, accounting, and business administration. Efforts are currently underway to extend such contacts to other departments as well.

FACULTY SUPPORT SERVICES

All UW faculty members associated with IPR hold full-time positions in departments other than IPR. IPR helps support faculty research in several ways.

First, IPR serves as the University's contact point between agencies underwriting policy-oriented research and faculty members who actually conduct such research.

Second, IPR initiates multidisciplinary programs requiring faculty expertise from more than one department.

Third, IPR disseminates to faculty members information essential for the preparation of grant proposals.

And fourth, IPR provides a wide range of technical support assistance to faculty members, including computer programming, data base management, editorial, accounting, and general clerical assistance. As an on-going effort, IPR also maintains a data tape management system in order to handle data materials from COMPUSTAT, CRSP, the Inter-University Consortium for Political and Social Research, and the U.S. Census Bureau. Plans for expanding this system are currently under development.

IN-HOUSE RESEARCH

In addition to its support functions, IPR also maintains an in-house research capability. This allows IPR to conduct original research on applied policy matters of concern to Wyoming residents. IPR maintains a library of state-oriented documents and a small research staff. The staff continuously collects, analyzes, and publishes information related to the Wyoming economy. The results of IPR research activities are published regularly in the *Wyoming Quarterly Update* and in editions of the "Census Retrieval and Information Service Report."

STUDENT PARTICIPATION

Faculty associated with IPR normally teach both undergraduate and graduate students. Students of such faculty members play active roles in all facets of IPR research and thus gain valuable practical experience that augments their classroom training. At present, 25 research assistants are supported by various IPR grants and contracts.



RESEARCH ACTIVITIES

IPR research is conducted in concert with state agencies, with federal agencies, with other universities, and with various private concerns.

State-oriented research includes topics in economics, social issues, and demographic issues. Annual studies of state hunting harvests provide a framework for developing and for testing improved sample survey strategies and techniques. Research related to state revenues and taxation provides an objective basis upon which sound public policy decisions can be made. In addition, small-area economic base studies provide valuable data to the state's tourism industry, while state population and housing characteristics are continuously under investigation by IPR staff.

Research projects conducted for federal agencies emphasize the development and testing of new approaches to valuing non-marketed goods, to examining energy-environmental trade-offs, and to assessing alternative conservation practices. Recent research efforts for federal agencies have valued atmospheric visibility, have determined the effects on human health of both short-term and long-term exposures to various air pollutants, have guided research related to the economic effects of acid precipitation, have estimated the benefits of information programs that pertain to earthquakes and other natural hazards, have determined economically efficient rates of natural resource extraction, and have quantified optimal rates of investment (in both public and private infrastructures) in communities adjacent to large-scale energy developments. Faculty members participating in these projects have earned international reputations in the general social science areas of benefit-cost analysis and survey research.

IPR

MAJOR FUNDING

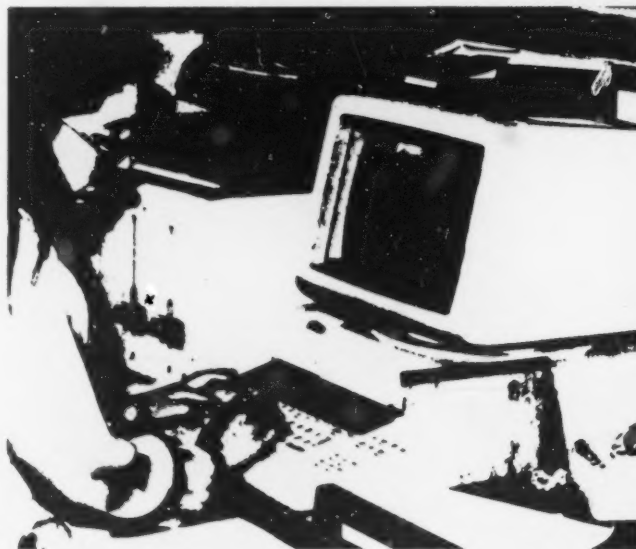
Major funding for IPR is provided by agencies of both the federal and state governments. At present, major federal funding is provided by the U.S. Environmental Protection Agency (EPA), by the U.S. Geological Survey (USGS), by the National Science Foundation (NSF), by the National Institute of Health (NIH), and by the Bureau of Sports Fisheries (BSF).

Major state funding currently is provided by the Wyoming Game and Fish Commission, by the Wyoming Department of Economic Planning and Development, and by the Wyoming Office of Planning and Coordination.

For more information about the Institute for Policy Research, contact Shelby Gerking, IPR director, or G. Fred Doll, assistant director at:

Institute for Policy Research
University of Wyoming
Box 3925, University Station
Laramie, WY 82071
Telephone: (307) 766-5141

THE UNIVERSITY OF WYOMING IS AN EQUAL
OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.



Wyoming Quarterly Update

Wyoming Quarterly Update (WQU) represents the efforts of the Institute for Policy Research (IPR) at the University of Wyoming to provide improved data access services. The data presented in WQU are assembled from secondary sources, such as government agencies and private industry. The staff of IPR greatly appreciates the ongoing cheerful cooperation of each of our data sources.

WQU provides current economic indicators and timely, easily accessible data. Most of the data published in WQU are updated quarterly with the most current numbers. The complete data sets from which WQU originates are maintained, together with documentation, by IPR. Readers are encouraged to contact IPR to find out how to gain access to data which does not appear in the WQU. Many data series, such as gasoline sales and taxation data, span more than 30 years. Numerous other series cover 20 years or more.

Efforts to expand the subject and geographic detail (county level data) of data sets will be made continuously. Featured for the sixth time in this edition are county profiles. Current data, graphics, and discussions are presented for Sweetwater, Sublette, Hot Springs and Park counties in this edition. Each subsequent edition of WQU will feature three to four county profiles. At that rate, each Wyoming county will be covered every two years. Current plans are to cover Campbell, Sheridan, Weston, and Crook Counties in the next WQU (September, 1983). No firm plans have been made to present particular counties in the December, 1983, WQU. Suggestions by readers will be considered in making that decision.

The cover page of each edition features a contour map which illustrates the geographic distribution of a particular variable. This edition features a contour map which contrasts the 1981 per capita income of each county. On the cover of the V1, #2 WQU we depicted 1978 county per capita income. The current WQU cover and the cover of V2, #1 are shown side-by-side below for easy comparison.

First-time readers of WQU should refer to the "Format" (last page) for an explanation of abbreviations and table formats.

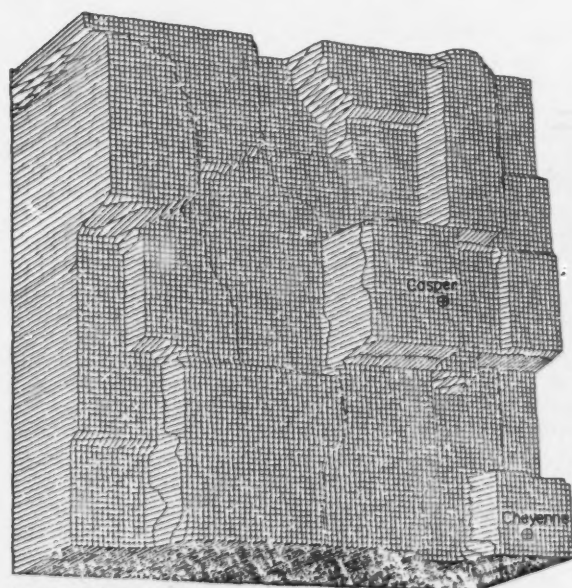
For additional information, to make suggestions, or to request data, contact WQU project manager John Merrifield at:

The Institute for Policy Research
University Station, Box 3925
Laramie, WY 82071
(307) 766-5141

OTHER IPR SERVICES AND RESEARCH REPORTS ARE LISTED ON THE LAST PAGE OF THIS WQU.

Wyoming Quarterly Update

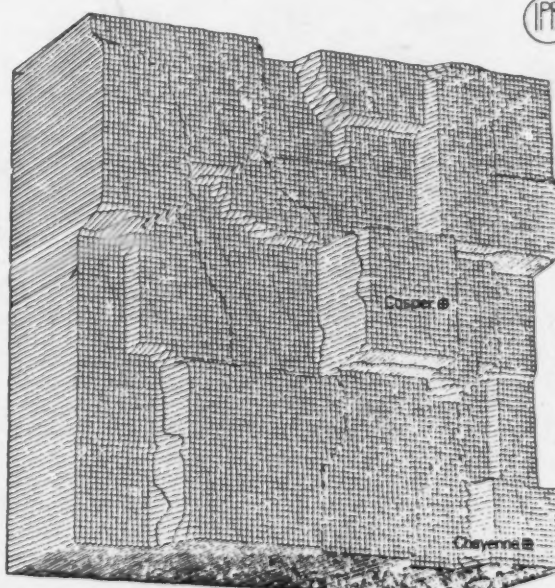
Winter 1982
Vol. 1, No. 2



1978 Per Capita Personal Income

Wyoming Quarterly Update

Summer 1983
Vol. 2, No. 4



1981 County Per Capita Personal Income



Introduction.....	1
Table of Contents.....	11
WYOMING SCFNE	
Overview and Perspective.....	2
Minerals Outlook.....	5
Agricultural Outlook.....	8
Unemployment Outlook.....	9
Job Openings Outlook.....	12
COUNTY PROFILES	
Sweetwater County Profile.....	14
Sublette County Profile.....	22
Hot Springs County Profile.....	31
Park County Profile.....	39
DATA GRAPHS AND TABLES	
Energy and Mineral Production	
Figure 11.....	48
Table 9.....	49
Agriculture	
Figure 12.....	50
Table 10.....	51
Tourism	
Figure 13.....	52
Table 11.....	53
Employment and Labor	
Figure 14.....	54
Table 12.....	55
Business Conditions	
Figure 15.....	56
Table 13.....	57
Construction	
Figure 16.....	58
Table 14.....	59
Utilities	
Figure 17.....	60
Table 15.....	61
Consumers	
Figure 18.....	62
Table 16.....	63
Comparative Cost of Living Index.....	64
Personal Income, Employment, Transfer Payments, and Divid- ends, Interest, and Rent, 1976-1981 for Wyoming and neighbor states.....	65
Banking and Finance	
Figure 19.....	66
Table 17.....	67
Government	
Figure 20.....	68
Table 18.....	69
WQU Format Description.....	70
Key to Units Abbreviations.....	70
Recently Published Wyoming-Related Research Reports.....	71

Project Manager.....John Merrifield
 Editorial Advisors.....G. Fred Doll

Shelby Gerking
 Tom Mast

Word Processing.....Lorri Fuhs-Pedersen
 Ema Shenefelt

Editorial Assistance.....Beth Daniels
 Research Aide.....Ruth Tebbutt

Graphics:

 Cover Page, Figures 4, 6, 8, 10, Maps 1-2.....UW Graphic Arts Services

 Figure 1-3, 5, 7, 9, 11-20.....Computer Graphics Package

Wyoming Quarterly Update is published four times per year in autumn, winter, spring, and summer editions.

The articles appearing in this publication represent the opinions of the authors and do not necessarily reflect the views of the state of Wyoming or the University of Wyoming or their respective executive officers. Duplication or quotation of material in this publication is welcomed, but it is requested that WQU, the Institute for Policy Research, University of Wyoming, be credited.

**WYOMING
SCENE**

Overview and Perspective

All indicators point to a continuation and strengthening of the nation's economic recovery. The stock market continues to post new all-time records, including the latest peak in mid-June. The April increase in the Commerce Department's index of leading indicators of 1.1 percent followed increases (after revision) of 2.2 percent in March, 1.4 percent in February, and 3.2 percent in January (Wall Street Journal (WSJ), 6/1/83). The April figures marked the tenth consecutive monthly increase. Of the eleven components which make up the index of leading indicators, seven were up. The most encouraging indicators were orders for new plants and equipment, and a longer workweek. Martin Feldstein, chairman of the President's Council of Economic Advisors, commenting on the good economic news (WSJ, 5/18/83), said that it was a sign that the economic recovery "is shifting into high gear." Indeed, after falling at a 1.1 percent annual rate during 4/82, the nation's gross national product (GNP) advanced at a 2.5 percent annual rate during 1/83 (WSJ, 6/1/83). The recovery seems to be taking place at a rate well in excess of the pace most analysts originally forecast. Consequently, forecasts of future economic growth are being revised upward. One good example of the magnitude of revisions comes from a senior Federal Office of Management and Budget economic analyst. The original forecast was for real GNP to grow 4.7 percent in 1983, and 4 percent in 1984 and 1985 (WSJ, 5/26/83). Now the outlook is for real GNP to grow 6 percent in 1983, 5-6 percent in 1984, and 4.5 percent in 1985. If accurate, the potential for large government budget deficits aborting the recovery would be greatly reduced.

The nation's largest industries, housing and autos, are leading the way out of the recession. During the first five months of 1983, housing starts occurred at a better than 1.6-million-unit annual rate (U.S. News and World Report, 6/6/83 and WSJ, 6/17/83). In 1981 and 1982, only 1.1 million units were started. Also noteworthy is the fact that bad weather held down housing starts and sales during that time, especially in March and April. That, and a 6.5 percent April increase in building permits (highest rate of increase since September 1979 [WSJ, 5/18/83]) suggests that 1983 may be an even better year for the housing industry than early housing starts data indicate.

Unfortunately, all the news for the nation's housing industry is not good. Much of the recent improvement has been due to declining mortgage interest rates, which reached a 33-month low of 12.73 percent early in May (WSJ, 5/6/83). However, the pace at which mortgage rates have fallen is slowing, and on June 8 (WSJ), one mortgage interest rate actually rose one-half percentage point. The government-backed rate went from 11.5 percent to 12.0 percent. Long-run interest rates, including those for home mortgages, have reacted to expected large federal deficits (\$210.2 billion in red ink projected for fiscal year 1983 [WSJ, 4/26/83]), and current rapid growth of the nation's money supply, which many finan-

cial analysts fear will be reflected in higher future inflation rates (Business Week, 6/6/83).

During recent months, each week seems to be marked by U.S. Automakers' reports of increased sales and plans to further increase production. The only exception has been a mid-May 3.4 percent decline in sales, compared to mid-May 1982. Sales during May 1982 were strengthened by unusual incentive programs. Consequently, the failure to match or exceed mid-May 1982 sales in 1983 was not viewed as serious. Further evidence of continued optimism among U.S. automakers came in the form of an 11.6 percent increase in production during the third week in May (WSJ, 5/20/83), and plans to set June 1983 production levels 16 percent higher than June 1982. With inventories still below historical norms, the outlook is for continued expansion of auto production levels.

Aggregate improvement was evident for the nation's entire industrial sector. Factory capacity utilization, after having fallen to 66.7 percent at the low point of the recession, has risen steadily. Most recently, it was 68.7 percent in February, 69.8 percent in March, 71.1 percent in April, and 72.0 percent in May (WSJ, 6/17/83). The 2.1 percent increase during April in the output of the nation's factories, mines, and utilities was the largest one-month increase in eight years. Between March and April, the average workweek went from 39.6 hours to 40.1 hours (WSJ, 5/18/83). The longer workweek is especially significant because changes in the length of the workweek tend to precede similar changes in employment. Despite increased production, inventories continued to fall during 1/83, and even with a 0.5 percent increase in business inventories in April (WSJ, 6/14/83), they are still well below historically desired levels, a signal that industrial production will continue to expand for the next few months at least. Further evidence that factories will seek to produce more was provided by the March and April increases in factory orders of 3.1



"WHY, YES, I AM AN ECONOMIC FORECASTER. HOW DID YOU GUESS?"

Reprinted with permission from John Trever and the Albuquerque Journal.

percent and 2.1 percent, respectively (WSJ, 6/2/83). Corporate profits during 1/83 were off slightly from a year earlier, but are forecast to average over 30 percent better than the same quarter of 1982 for the final three quarters of 1983 (WSJ, 5/20/83). Even though factor capacity utilization is still very low by historical standards, capital spending has already begun to pick-up. During April, orders for non-defense capital goods jumped 9.6 percent (Business Week, 6/6/83). For all of 2/83, a 2.6 percent increase (after adjusting for inflation) in capital spending is anticipated (USNWR, 6/20/83). That follows a decline of 1.9 percent during 1/83. Even with a forecast increase in capital spending of 4.5 percent during 4/83, total capital spending during 1983 would fall 3.1 percent short of 1982 capital spending. However, the current rate of capital spending is seen as relatively rapid for the opening stages of an economic recovery. Productivity is also increasing. The labor productivity of the nation's manufacturing industries was up at an 8.3 percent annual rate in 1/83 and a 1.0 percent annual rate in 4/82, after having fallen 1.0 percent for all of 1982 (WSJ, 5/27/83). For all non-agricultural industries, productivity was up at a 4.7 annual rate during 1/83 and 0.4 percent in 4/82. Increased productivity will help keep inflation in check as economic expansion picks up steam.

The current inflation outlook remains bright. The Consumer Price Index was nearly unchanged for 1/83. The annualized rate of inflation during 1/83 was only 0.4 percent, the smallest increase in nearly 18 years (WSJ, 4/25/83). Crop losses to bad weather and higher fuel prices, due mostly to higher taxes, were largely responsible for the sudden increase in consumer prices in April. The annualized rate of inflation during April was 7.2 percent (WSJ, 5/25/83). Most major factors underlying the April inflationary surge are viewed as one-time occurrences, but a return to the near-zero inflation rates of the preceding six months is also ruled out by most analysts. The consensus view of economic analysts seems to be that the spending power of a dollar will shrink between 4 and 5 percent during each of the next two years.

News of the ongoing economic turnaround has bolstered consumer confidence. May 1983 retail sales were strong despite widespread poor weather (WSJ, 6/3/83). Most of the July 1982 federal income tax cut came to consumers through the mail as part of their 1982 tax refund checks. Indeed, U.S. personal income rose 0.8 percent in April, the biggest jump since July 1982 when the tax cut went into effect. Another 10 percent cut in federal income tax rates will take effect this July, further supplementing consumers' buying power.

The unemployment rate continued its slow decline, reaching a seasonally adjusted rate of 10.1 percent in May (WSJ, 6/6/83). The closely watched unemployment rate remains a poor indicator of changing economic conditions. While the recession was worsening, the increase in the unemployment rate was moderated by workers leaving the labor force to return to school or

simply because they had given up trying to find a suitable job. Now with the recovery underway, the reverse is happening, holding down the pace at which the unemployment rate declines. In April, the creation of an additional 350,000 jobs lowered the unemployment rate only 0.1 percentage point (from 10.3 to 10.2 percent), because at the same time the labor force was swollen by the addition of 300,000 new job seekers (WSJ, 5/18/83). There are some indicators that for a few months of the summer, the return of previously discouraged workers to the labor force, plus seasonal factors such as students seeking summer jobs, could actually cause labor force growth to outstrip employment growth, with the result that the unemployment rate would rise (WSJ, 6/6/83). The long-run trend should be downward, but at what will be to some people a painfully slow pace. Economist Alan Greenspan, chairman of the Council of Economic Advisors under President Ford, sees the nation's jobless rate falling below 9 percent early in 1984 (USNWR, 6/6/83).

In Wyoming, the unemployment rate has risen sharply during the last twelve months. During April, Wyoming's seasonally adjusted unemployment rate reached 10.6 percent, and for the first time in recent years topped the nation's seasonally adjusted rate. Unadjusted figures place Wyoming's jobless rate at 11.0 percent in April, up slightly from the revised 10.9 percent unemployment rates recorded in February and March. Wyoming's unemployment situation is discussed in greater detail in a separate article. It appears immediately before the first county profile.

Figures 1 and 2 (next page) show that the nation's economic woes (which began officially in July 1981) affected Wyoming's critical mining industries and then eventually the entire state economy with a time lag of several months. (Note that in Figures 1 and 2 unadjusted unemployment rates have been plotted.)

From February to April, Wyoming's unemployment rose only 0.1 percentage point. The slowdown in the rate of increase in the unemployment rate should be reinforced, and could perhaps even be reversed moderately by seasonal factors such as increased tourism, construction, and agriculture. 1983 should be a good year for tourism in Wyoming and elsewhere. Highway traffic is expected to be 3 percent this summer, and the National Park Service (NPS) anticipates a 4 percent increase in visitations (Business Week, 6/6/83). Top NPS attractions such as Wyoming's Grand Teton and Yellowstone National Parks are likely to see even larger increases. However, a long-lasting turnaround in Wyoming's economy is not likely until late this year or early 1984. Key mining sectors are still plagued by inventories built up during the national recession. Several more months of national recovery will be required before these inventories are reduced enough to return demand to pre-recession levels. A more detailed discussion of Wyoming's mining industries follows Figures 1 and 2.

John Merrifield

#

#

Figure 1

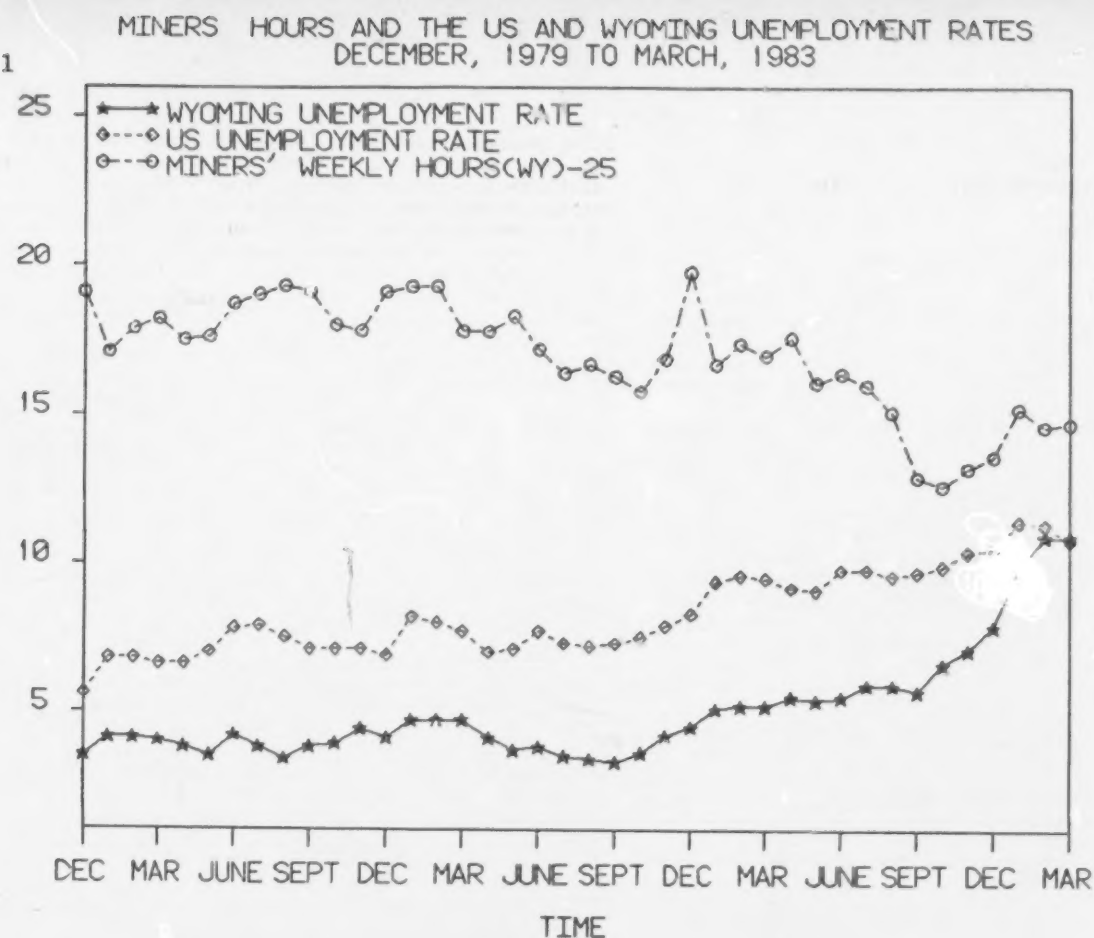
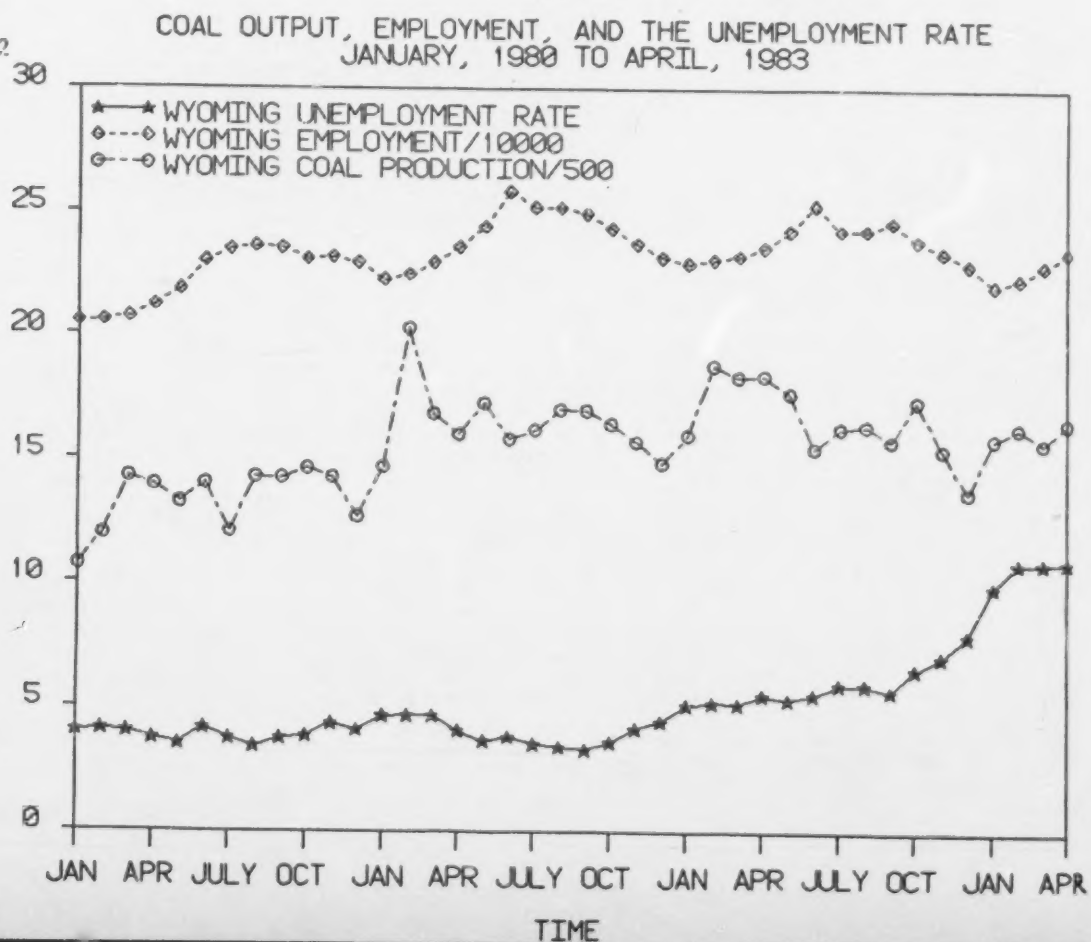


Figure 2



Summer Minerals Outlook

OVERVIEW

Admittedly, it is hard to be optimistic when the rig count keeps falling, when producers shut in gas wells for lack of demand, when uranium mines continue to shut down, and when construction of eight large power plants slated to use Wyoming coal are postponed indefinitely. One must look to the future in times like this or consider the existing conditions in retrospect.

As for the future, undiscovered and, as yet, undeveloped discoveries of oil and gas in Wyoming's Overthrust Belt point up the potential for rapid expansion in better economic times. Couple this with other rather spectacular discoveries in the state, and the future of the petroleum industry becomes far less pessimistic.

The State of Wyoming still has the second largest uranium reserves in the United States (New Mexico is first). Although these reserves won't physically disappear by not mining them, they are reduced by lowered prices because a reserve is not a reserve unless it can be mined at a profit. The point is that the state is a uranium province with significant uranium resources only awaiting renewed demand.

Although Wyoming coal may take some knocks in the near future as projected users delay or cancel the construction of coal-fired power plants, the trillion tons of coal resources underlying the state are far from insignificant. These resources account for 25 percent of the nation's coal resources and ensure Wyoming a significant share of the coal market for many decades, if not centuries. Wyoming is already the third largest coal-producing state in the nation, a position it will easily hold even if its production levels off.

As for retrospect, not long ago oil and gas production forecasts for Wyoming showed declining production for both oil and gas. Instead, oil production has reached a plateau with only a slight annual decline. Gas production has turned upward at phenomenal rates. In this same time frame, uranium production boomed and is now falling back to pre-boom day levels. Coal has increased substantially from 7.4 million tons in 1970 to 108 million tons in 1982. In the 1960's Wyoming coal production only averaged 2 - 3 million tons per year. The net result is that the assessed value of the state's mineral industry is now almost \$6 billion, a far cry from the \$505 million in 1970.

On a slightly different note, there were several bills introduced in Wyoming's 1983 legislative session that related to the mineral industry. Of two bills calling for reductions in the state's mineral severance tax, the Legislature reduced the severance tax on coal mined underground to 7.25%, but did not approve any reduction of the tax on uranium. Another

bill, however, apparently makes it possible for the uranium industry to mothball some mines until the market improves. Under this bill, certain reclamation requirements can be deferred to prevent premature backfilling of pits that still contain valuable uranium reserves. A bill to increase the size of the Wyoming Oil and Gas Conservation Commission was vetoed by the Governor.

Gary B. Glass, State Geologist,
Wyoming Geological Survey

OIL AND GAS UPDATE

Amoco has made the newest discovery in the Wyoming Overthrust Belt. Their 1-A Sulfur Spring Unit (SE₄ SE₄, section 4, T.15 N., R. 120 W.) was recently completed as a Phosphoria gas discovery. The new field, which is several miles north of Evanston, has been named "Sulfur Spring".

Marathon Oil Company has filed an application to drill near Yellowstone Park at a location two miles south of the Wapiti Ranger Station. No information on the targeted formation for the well has been released. Marathon also noted that it plans to fly the drilling equipment in by helicopter. This operation could mark the first helicopter mobilization in the lower forty-eight states.

Due to the sharp decline in demand, natural gas producers are shutting in or reducing production at many wells in Wyoming. Don Basko, supervisor of the Wyoming Oil and Gas Conservation Commission, recently estimated that 400 out of 1,800 potential gas-producing wells in Wyoming have been shut in. If wells remain shut in or increase in number, natural gas production forecasts for the year may need scaling down.

Late in the second quarter of the year, Exxon reaffirmed its plans to start construction on two gas "sweetening" plants in 1985. Each of the two plants, which will be located near Big Piney, will have a capacity of 600 million cubic feet per day. The sour gas will be produced from Mississippian Madison and Ordovician Bighorn discoveries on the La Barge Anticline. Reserves of the gas, which has a low heat value (low BTU), are estimated at 35 trillion cubic feet.

Northwest Pipeline Corporation, however, has deferred plans to build a 400-million-cubic-foot-per-day plant near Opal. Present market conditions are blamed for the delay. American Quasar also announced a 2 - 5 year postponement of its plans for a 1.2-billion-cubic-foot-per-day gas plant near Big Piney.

In a recent decision by the State Board of Land Commissioners, Wyoming will stop awarding state oil and gas leases on the basis of drawings. In July of this year, the drawing procedure (which was often called a lottery) will be replaced by competitive bidding. In the new system, tracts will be awarded to the highest bidder. Bidding will be oral.

Alan J. VerPloeg, Staff Petroleum
Geologist, Wyoming Geological Survey

BASE, PRECIOUS, AND FERROUS METALS UPDATE

During the second quarter of 1983, exploration activities for metals were fairly subdued primarily because of the weather. However, activity was reported in the following areas of the state:

1. Exxon Minerals announced that they had picked up the historic Ferris-Haggerty copper mine and adjacent properties.

2. Several companies expressed interest in the Fletcher Park volcanogenic massive sulfides in the southern Sierra Madre.

3. A number of companies continued exploration for precious and strategic metals in the Elmers Rock greenstone belt of the central Laramie Range.

4. Several companies and individuals announced summer plans to explore for precious and strategic metals in the Copper Mountain complex near Shoshoni.

5. Timberline Minerals and Kerr-McGee Corporation continued exploration and testing for gold in their properties in the Seminole Mountains.

6. Some limited underground and surface exploration activity was underway in the South Pass gold belt by individuals and small mining companies.

Perhaps the best indication of continued or even renewed interest in the state's metal and other mineral deposits was the highly successful Ore Genesis Symposium held on the University of Wyoming campus in April. At least 258 persons attended the meeting, which was jointly sponsored by the Wyoming Geological Survey, the Wyoming Geological Association, and the University's Geology Department. Extended abstracts of the papers presented at the symposium were published and are available from the Wyoming Geological Survey in Laramie (Public Information Circular 19, \$2.00 each).

*Dan Hausel, Deputy Director,
Wyoming Geological Survey*

URANIUM AND NONFUEL MINERALS UPDATE

The market price of yellowcake increased slightly in the second quarter. Latest figures indicate the price of yellowcake has risen to \$23.25 per pound, an increase of \$1.75 per pound over February. According to production statistics from the State Inspector of Mines, however, 1982 uranium production was 3,756,881 tons, down from 4,727,938 in 1981.

Uranium production in Wyoming should decrease in the next quarter due to cutbacks and the closure of the Sweetwater mine. Union Carbide announced a layoff of 20 employees and a 50 percent reduction in its Gas Hills Mill capacity.

The trona industry suffered more layoffs. Stauffer laid off 117 employees in May; Allied

reduced its work force by 127 employees in April. Production in 1982 declined to 10,932,563 tons, 241,000 tons less than 1981 (State Inspector of Mines). More importantly, April 1983 production was reported 15 percent less than March. Production is expected to decrease through 1983 due mostly to a decline in the bottle glass market, which is only slightly offset by an increase in auto glass. Fifty-four percent of produced soda ash is used for glass, 20 percent for chemicals, 7 percent for soap and detergents, 4 percent for water softeners, 3 percent in paper production processes, and 12 percent for a multitude of other uses.

On a brighter note, FMC has requested state approval for a solution-mining operation, following apparently successful tests of the method. This will be the world's first trona solution mine.

The State Inspector of Mines reports 1982 gypsum production as 447,939 tons. Gypsum production is expected to increase in the next quarter as housing starts increase in the region.

Collectively, four limestone operators reported 1,081,882 tons were produced in 1982. The limestone was used for sugar rock, construction, and cement. Due to an increase in construction activity, limestone production is expected to increase in 1983.

No layoffs were announced in the Wyoming bentonite industry for this last quarter. Production is expected to increase only slightly as the demand for iron, steel and foundry castings increases. These increases, however, could be offset by a decline in the use of drilling mud by the petroleum industry.

The Leefe, Wyoming, phosphorous plant continued to process phosphate mined in Idaho.

*Ray E. Harris, Uranium and Industrial
Minerals Geologist, Wyoming Geological
Survey*

COAL UPDATE

Coal production figures for Wyoming are now official with the release of the State Mine Inspector's annual report. A summary of the production for each county and for each coal basin is shown on the next page. By way of comparison, the total 1982 coal production in the United States was 822.5 million tons, an increase of less than one percent over the 819.3 million tons produced in 1981. Although the total amount of coal shipped to electric utilities in 1982 increased over 1981, the amount of coal consumed by electric utilities decreased in 1982, meaning that coal stockpiles at utility plants are very high at the present time and electric power generation is not increasing at rates once predicted.

Another indication of the soft coal market was evident in May when McGraw-Hill's Coal Week marker spot price for coal (FOB mine) from Wyoming's Powder River Basin dropped from \$6.25/ton to \$5.75/ton. Coal Week also completed and published a survey of planned power

1982 Wyoming Coal Production by County and by Coal Basin¹

County	Production	Percent of Total Production	Number of Mines	Number of Employees
POWDER RIVER BASIN				
Campbell	81,220,562	75.4	13	2,588
Converse	3,351,065	3.1	1	246
Sheridan	2,991,399	2.8	2	241
Total	87,563,026	81.3	16	3,075
GREEN RIVER BASIN				
Sweetwater	11,020,932	10.2	3	1,108
HAMS FORK REGION				
Lincoln	4,315,617	4.0	2	586
HANNA BASIN				
Carbon	4,988,297	4.6	7	871
BIG HORN BASIN				
Hot Springs	66,711	0.1	1	7
TOTAL WYOMING	107,954,583	100	29	5,647

¹Source: Wyoming State Inspector of Mines
Annual Report, 1982

plant expansions. The list includes ten plants that will be built to use Wyoming coal as fuel, requiring up to 21.6 million tons of new production per year; eight plants that will be delayed indefinitely (Wyoming loses 12.2 million tons of forecast production per year); and four plants that will be delayed for several years (affecting 6.1 million tons per year until they are built).

In this last quarter, the Jim Bridger mine laid off 140 miners and terminated 18 contract employees. In addition, the Dave Johnston and Jim Bridger mines have placed many of their workers on reduced 32-hour work weeks.

On the brighter side, Arch Mineral Corporation recently called back 59 workers that were laid off last fall from their Seminole No. 2 mine

at Hanna.

On the synfuels scene, it now appears that an underground coal gasification project, to be based in southwest Wyoming, will be allowed to begin negotiations for federal loan and price guarantees from the Synthetic Fuels Corporation. The project, backed by World Energy Inc. of Laramie and Extractive Fuels, Inc. of Casper, is applying for about \$40 million in federal aid for a \$60 million plant that could be starting construction by the spring of 1985. This is currently the one project in Wyoming still being considered for federal aid in funding.

*Richard W. Jones, Staff Coal Geologist,
Wyoming Geological Survey*

#

Summer Agricultural Outlook

The outlook for farm income, although improved since the advent of the PIK program, continues to remain uncertain. Unknowns include the strength of the developing economic recovery at home and abroad, timing of PIK marketings, the extent of input use cutbacks because of PIK and the acreage reduction programs, and uncertain consumer demands.

As the second quarter of 1983 began, the U.S. economy appeared to be in the early stages of a modest recovery. Total employment has stabilized, industrial production is beginning to increase, and consumer demand is expected to gradually strengthen over the remainder of the year. Signs of a slow turnaround in the international economy are becoming more apparent, suggesting a small increase in agricultural trade.

High participation by producers in the 1983 farm programs will improve the cash flow situation for many grain farmers. With lower production expenses, many farmers will be able to retire high-interest debt, reducing interest expenses. However, heavy involvement by grain producers in the PIK program will have negative impacts on livestock producers.

With projected higher crop prices for this fall, livestock prices have been altered. Higher feed prices may force livestock producers, especially of hogs, to rethink their production plans. The result may be smaller meat supplies in 1984 than previously expected, particularly in the second half of the year.

GRAIN SITUATION

This year's commodity programs - and especially the PIK program - are having wide ranging impacts on the agricultural economy. Crop prices have risen substantially since the commodity markets adjusted to much smaller 1983 plantings. The reduced acreages should lower this year's harvest and pull down grain stocks as we move into next season.

Winter wheat production is expected to be 10 percent smaller than 1982's record 2.11 billion bushels. This would be the first downturn in winter wheat production in 4 years. Wyoming producers reduced plantings 60,000 acres

from 1982's 285,000 acres planted in winter wheat. The state's projected yield for 1983 is expected to drop from 7,980,000 bushels to 6,975,000 bushels.

A 30 percent drop in feed grain production is still anticipated for 1983 because of the high participation in the feed grain program. The 1983-84 feed use forecast has been raised, reflecting strong feed use during the first half of 1983. Production by the United States' major competitors in 1982-83 (excluding Canada) is estimated to be down 24 percent. Thus, the U.S. share of world trade may improve slightly as we move into 1984.

LIVESTOCK

Feeder cattle prices rose during the first quarter in response to PIK grazeout provisions. The secondary effects of PIK will raise grain prices this fall and that will be less beneficial to feeder cattle producers. It is likely that feeder cattle prices have peaked for 1983, although substantial declines in prices are not expected this fall.

Net feedlot placements during the first quarter of 1983 indicated a 12 percent decline from a year ago. This was the result of generally excellent prospects for grazing on ranges and pastures this summer, poor feedlot conditions due to bad weather, and the extra demand for stocker cattle placed on PIK wheat grazing. In addition, the calf supply is somewhat smaller, reflecting a 2 percent smaller 1982 calf crop.

The demand for lighter calves is expected to remain good through early summer. In addition to the 2 percent decline in available calf supplies already noted, the lower number of cows and replacement heifers reflected in the January 1 inventory, coupled with larger than normal death loss this spring, point to a 1983 calf crop that may be down 1 to 3 percent from 1982.

In order for feeder calf prices to remain in the low to mid \$70's as we move into fall, fed cattle prices must improve over current prospects. Given the existing feed costs and fed cattle price prospects, feeder cattle will not move above \$64-\$67 this fall, with calf prices in the \$71-73/cwt range by late summer.

Robert D. Carver
University of Wyoming

#

Unemployment Outlook

In December 1982, the U.S. Census Bureau released a report, indicating that Casper had the lowest unemployment of the 305 cities the bureau had analyzed nationwide. The data used were 2-5 years outdated.

In February 1983, it was reported that Alexander Grant and Co., Chicago, Illinois, had determined the net worth of the state's unemployment trust fund per covered worker to be \$448, the highest in the nation.

But the cheery news seemed as small ironies among the more ominous notes, mere parodies of the prosperous times. Already, it was becoming clear; the good times were gone.

In January 1983, state newspapers reported that unemployment had "soared to 6.9 percent" in November 1982. Within five months, by April 1983, Wyoming's seasonally adjusted unemployment rate reached 10.6 percent, exceeding the national adjusted rate (10.2 percent) and reaching its highest level in 20 years. More than 28,000 people were out of work, a record high. In

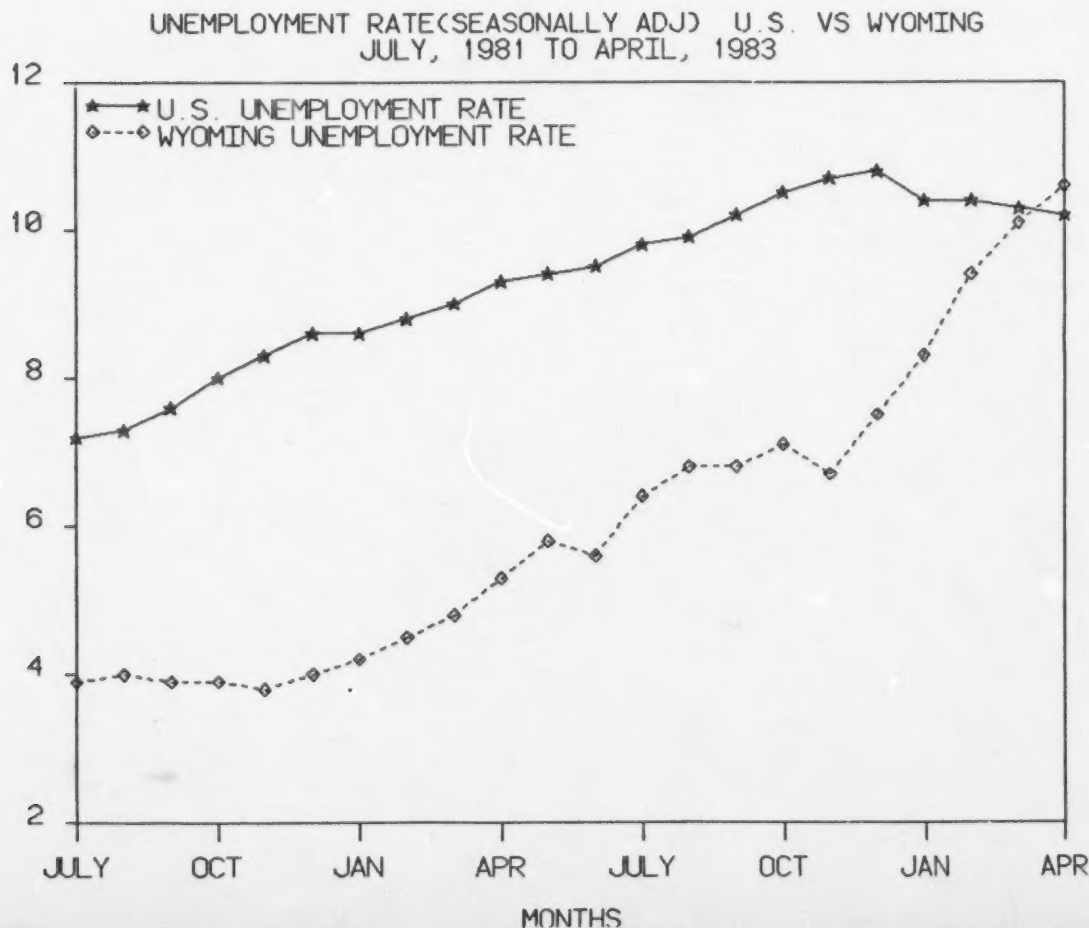
Natrona County, the overall rate had reached 12.7 percent, with an estimated 5,500 persons seeking work.

At the same time, the condition of the unemployment compensation fund steadily deteriorated. Without action, state officials began predicting the fund could go broke by mid-August.

By June, public assistance in the form of aid to families with dependent children had reached its highest level in history, paying out at a rate of \$1 million a month. Reported cases of child abuse and neglect rose; so did foster care placements.

"I can't prove this is related to unemployment," Stan Torvik, director of the Wyoming Department of Health and Social Services, says, "but it certainly looks like it is."

Sales tax receipts also declined with Wyoming's economic fortunes. Sales began slipping during 1982, and the slippage gained momentum like a snowball rolling down hill. The last quarter posted a decline of 8 percent over



the same quarter of 1981, according to Department of Revenue figures. On a rolling quarter basis, 10 counties posted gains, while 13 posted declines in revenue receipts. By April 1983, not a single county showed a gain.

What factors contributed to the sharp and dramatic increase in Wyoming's unemployment? Or indeed, was the increase as precipitous as it first might appear?

First, Wyoming's economy was never completely divorced from trends in the national economy, although it appeared for a time Wyoming might at least be well-insulated from the kind of high unemployment that plagued the industrial states of the Northeast and Midwest.

Beginning in November 1981 and continuing through October 1982, Wyoming's seasonally adjusted unemployment rate began to increase, posting just one decline in 12 months. The rate rose from 3.8 percent in November 1981 to 7.1 percent in October 1982, an increase of 3.30 percentage points, or an average monthly increase of 0.28 percentage points.

During the same period, the national seasonally adjusted rate rose from a much higher 8.3 percent in November 1981 to 10.5 percent in October 1982, an increase of 2.20 percentage points, or an average monthly increase of 0.18 percentage points.

While Wyoming unemployment was rising at a slightly faster pace than national unemployment from November 1981 through October 1982, Wyoming unemployment still remained well below national levels. At the same time, the difference between the two rates remained relatively constant throughout the entire 12-month period. The highest monthly difference between the two rates was 4.60 percentage points, while the lowest monthly difference was 3.90 percentage points. The mean difference for the entire 12-month period was 3.10 percentage points.

John Mokler, management analyst with the Wyoming Employment Security Commission (ESC), Research and Analysis Section, says for reasons not fully known, it appeared for a time that a group of states roughly encompassing Wyoming, the Dakotas, and the Great Plains through Texas might escape the worst of the high unemployment.

But in Wyoming, at least, the situation changed rather rapidly. Precisely when national unemployment figures peaked, and then began to decline slowly, Wyoming unemployment began to rise sharply. From November 1982 through April 1983, Wyoming unemployment increased more in six months than it had during the entire preceding year. The difference between state and national unemployment rates quickly closed, and in April 1983, the state's unemployment exceeded national unemployment for the first time in recent years.

While the rise in unemployment since November 1982 has indeed been dramatic, there does not seem to be any single factor triggering the increase, Mokler says.

"I can't point to any one thing that changed the rate of increase," he says, "a number of factors contributed to the unemployment we now see."

Mokler suggests the trickle down from the national economy began to accumulate in Wyoming. Reduced manufacturing activity in other states, less demand for electricity, and falling oil prices all took a toll.

The drop in power demand and doubts about plant reliability contributed to a depression in the uranium industry. Between 1980 and 1983, the number of uranium operations in Wyoming dropped from 19 employing 5,400 workers, to 11 employing just 2,000 workers, according to Department of Economic Planning and Development figures.

Trona plants in southwestern Wyoming also experienced lay-offs associated with over-supplies and slack demand, due in large measure to reduced demand for chemicals, bottle glass, housing glass, and auto glass.

In northwestern Wyoming, high costs associated with cutting Bridger-Teton timber and a slump in demand for timber products contributed to plant closures.

Coal production, especially in the Powder River Basin, fared better in 1982, achieving record-high outputs, but the smallest overall increase in 11 years. In the Hanna Basin, 1982 was marked by continuing lay-offs and dropping demand. Two mines closed in 1982 and a third closed in 1983. By April 1983, the unadjusted unemployment rate for Carbon County stood at 16.3 percent, topped only by Lincoln County (19.5 percent).

While total coal production increased in 1982, total coal employment continued to decline as firms found it most economical to shift their focus from the relatively thin coal-seamed, labor-intensive mining areas such as Hanna to the thick coal-seamed, highly-mechanized Powder River Basin. In 1982, according to State Mine Inspector figures, the Powder River Basin accounted for 81.3% of total Wyoming coal production, 75.4% in Campbell County alone. Even in the Powder River Basin, however, many mines have been operating below planned capacities due to soft coal prices and lack of demand.

Many factors affecting high unemployment seem to be exacerbations of trends that already existed throughout much of 1982, especially in the pivotal energy and minerals industries. With a general lessening of demand, inventories accumulated.

In the case of oil, a worldwide oil glut developed. In December 1982, the Saudi Arabians threatened to unilaterally lower oil prices from the \$34 OPEC base price. Some U.S. spot crude prices fell as low as \$26.90 by February, according to the Oil and Gas Journal, and some spot prices for sour crude fell even more. On

March 15, 1983, with the threat of a global price war looming, OPEC agreed to fix its prices at \$29 per barrel and set a 17.5-million-barrel-per-day production limit in an attempt to dry up the glut. It was the first price cut in the 22-year history of OPEC.

In Wyoming, responding to lower prices and slack demand, drilling activity fell throughout the latter portion of 1982, according to Hughes Tool Co. surveys. By February 1983, drilling activity had hit a 7-year low.

"You don't realize it, but the price of oil and natural gas also affects the coal market," says Dick Jones, coal geologist for the Wyoming Geological Survey. Falling oil prices make costly plant conversions to coal less attractive. And the initiation of risky synthetic fuels projects becomes even less desirable. Jones says it appears some oil companies formerly involved in synthetic fuel plans are now opting to invest instead in Alaskan oil leases, believing the short-term return will be greater and the investment more secure.

Regarding the sharp rise in unemployment during the first quarter of 1983, at least three contributing factors might be advanced.

First, as had been described, already downward trends due to low demand and high inventories in the energy and minerals industries simply continued into 1983.

Second, the multiplier effects of lay-offs that occurred earlier in 1982 might not have been registered immediately as unemployment impact. If a plant closes today, the shoe store down the street may not close tomorrow. But it may be forced to close six months later.

And third, seasonal business slowdowns associated with the winter months may have aggravated the situation still further.

IPR analyst John Merrifield also notes that due to the relatively small size of the Wyoming

labor force, a few lay-offs--coupled with their attendant ripple effects--can affect unemployment rather rapidly. By the same token, improvements can occur just as rapidly.

"The numbers in Wyoming are low enough that a few plant closures can have a dramatic impact," he says. "I'm not really too surprised by the upsurge that took place."

Labor force size may have affected unemployment in another way. In January 1983, the total labor force size was 244,874. By March, it was 256,656, an increase of 5 percent in three months. During the same 3-month period in 1982, labor force size increased only 1 percent; in 1981, the increase for the period was only 2 percent.

Such growth might indicate an unseasonably large in-migration of persons seeking employment in Wyoming during late 1982 and early 1983, when Wyoming unemployment still was lower than the national average--persons who found upon arrival a slowing economy that could not readily absorb the increase. Such relationships are difficult to establish, however, and must be viewed as speculative at best.

While the present difficulties with respect to high unemployment cannot be minimized, there are some hopeful signs. Mokler says he has detected some decline in the number of initial unemployment claims filed recently. And the start of the tourist and construction seasons should result in some seasonal improvements. Perhaps more importantly, the national economy continues to generally improve.

But recovery could be a slow process, and a full recovery may not commence until nationwide stockpiles of Wyoming coal and other mineral products have been reduced--possibly late this year.

S.T. Mast, IPR

#

Job Openings Outlook

Approximately 130 securities salespeople are employed in Wyoming, almost twice as many as in South Dakota where the population is greater. Securities salespeople help clients select and purchase stocks, bonds, mutual funds, and other securities. They analyze investments, furnish information about market conditions, and distribute information about securities and financial planning to customers. The job outlook in Wyoming for such salespeople is good because many individuals (particularly ranchers) are seeking systems to secure financial gain. The business community tends to be rather conservative about stock investments.

Securities sales people must be licensed both on the national level and on the state level by the National Association of Securities Dealers. The national exam is given once a month in Denver, Colorado. To be eligible, applicants must have been on a payroll for at least 4 months. The state exam given by the National Association of Securities Dealers is also given once a month at various locations.

Although high school graduation is the minimum education required, a college degree is becoming necessary for beginners in this field. Some employers prefer a degree in business administration, economics, finance, or liberal arts. Most employers provide training to meet requirements for registration and licensing.

Beginning salespeople spend much of their time talking on the phone and meeting with prospective customers. After establishing clientele, they put more effort into servicing existing accounts and less into seeking new ones. Some mutual funds representatives work part-time.

Until they meet licensing requirements, securities salespeople trainees are usually paid a salary. Starting salaries range from about \$1,000 - \$1,500 per month. After licensing requirements are met, securities salespeople are usually paid a commission. Average

earnings are about \$18,000 - \$30,000 per year, although some earn more than \$50,000 per year.

There is a shortage of funeral directors and embalmers in Wyoming due to a lack of training opportunities in the region. Funeral directors and embalmers prepare the body for burial and arrange the funeral service. They are responsible for complete care of the deceased person from the time a call is received notifying of the death, until the funeral has been concluded. They talk with the family of deceased persons to determine details of funerals such as selection of a casket, religious rites, time of the services, and the location of a cemetery. Arrangements are made for transferring the body to the mortuary, where it is embalmed and placed in a casket for services. Because most funeral homes in Wyoming are small, the majority of funeral directors are also licensed embalmers.

Funeral directors and embalmers have separate licenses, although both are obtained from the State Board of Funeral Directors and Embalmers. Licensing requirements for an embalmer include a high school diploma or equivalent, attainment of the age of 21 years or older, one year (30 hours) of college, one year apprenticeship in Wyoming with a licensed funeral home, and passage of the examination given by the State Board of Funeral Directors and Embalmers. Students are strongly advised to take their apprenticeship before training to determine compatibility with the work.

The entry wage for apprentices is approximately \$1000 per month. After licensure, salaries range from \$1500 to \$2000 per month. Owner/directors may earn more. Wages may include housing in some cases.

Professionals indicate that valuable qualities for funeral directors and embalmers include a desire to help people in a time of great stress, an ability to communicate with and counsel clients, and a willingness to work flexible hours due to the unpredictability of the workload.

*Karen Scott,
Wyoming Career Information System*

#

**COUNTY
PROFILES**

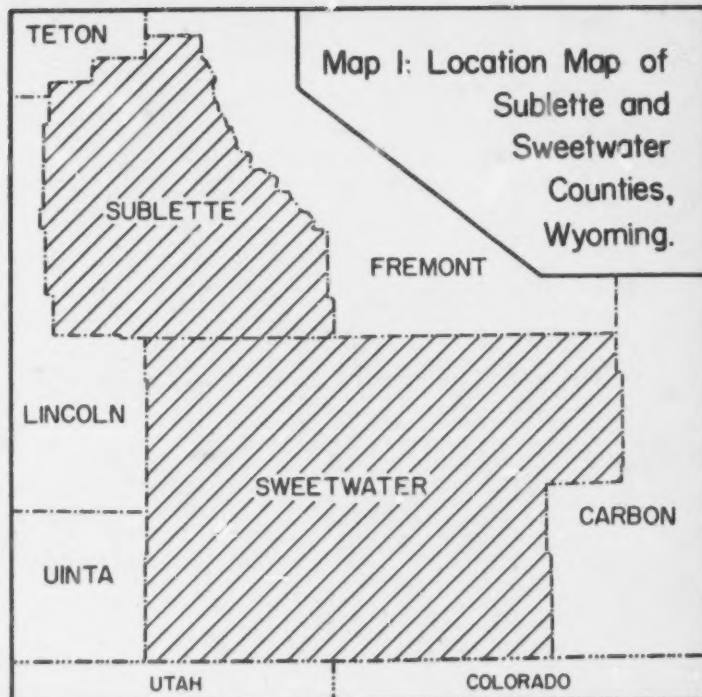
Sweetwater County Profile

PHYSICAL CHARACTERISTICS AND CLIMATE

Sweetwater County is located in southwestern Wyoming (Map 1), bordered by the states of Utah and Colorado to the south, and clockwise, beginning to the west, by Uinta, Lincoln, Sublette, Fremont, and Carbon Counties, in Wyoming. Its two largest towns are Rock Springs (with a 1980 population of 19,458), and the county seat, Green River (with a 1980 population of 12,807). The population of the entire county was 41,723 in 1980, and 1982 population projections by the Wyoming Department of Administrative and Fiscal Control anticipate further growth to nearly 50,000 residents by 1983.

The county's population places it in third place among Wyoming's 23 counties, trailing only Natrona and Laramie. Its land area of 6,759,348 acres makes it the largest in Wyoming and--along with San Bernardino County, California, Coconino County, Arizona, and San Juan County, Utah--one of the largest in the nation. The topography can be characterized as a mixture of gently rolling hills and isolated plateaus, buttes, and peaks. The Continental Divide follows the ranges of hills and low-lying mountains which encircle the Great Divide Basin, most of which lies in the northeast region of Sweetwater County. A significant amount of the county, including Rock Springs (6,271') and Green River (6,100'), can be found between 6,000 feet and 7,000 feet above sea level. However, some isolated peaks approach 9,000 feet. The county's major watercourse is the Green River, which flows from the Fontenelle Reservoir located just west of the county line in eastern Lincoln County into the Flaming Gorge Reservoir south of the town of Green River.

The climate of Sweetwater County is classified as high desert because of its relatively long, cold winters, and shorter, hot summers. High temperatures approach 100°F in the summer, while winter lows have been known to plummet to -45°F. Precipitation is light, with most of the county averaging 7"-9" annually. The lack of precipitation is not surprising when one considers the fact that Sweetwater County is encircled by major mountain ranges. To the west are the Wasatch and Wyoming Ranges. To the north is the Wind River Range. To the south is the Uinta Range, and to the east are the Sierra Madres and Snowies. These mountains deplete the air of much of the moisture which might otherwise reach Sweetwater County. Rock Springs weather data are representative of most of the county. Temperatures average 21.5°F in January and 68.7°F in July, with 44.2°F being the annual average. Snowfall averages 34.9" each year, with a water equivalent total annual average precipitation of 8.7". The growing season approaches 4 months per year.



HISTORY

The county owes its name to the discovery of gold in the Sweetwater River near South Pass City, even though the Sweetwater River flows entirely outside the borders of present-day Sweetwater County. South Pass City, now in Fremont County, was the Sweetwater County seat from 1867 to 1875.

The human history of Sweetwater County began around 6,000 B.C. Archaeologists discovered artifacts left by Paleo-Indian hunters in the area now known as Deadman Wash in eastern Sweetwater County.

Sweetwater County's recorded history began somewhat later with the arrival of the first white men in 1824. In the following year, several white traders and trappers, including members of the historic William Ashley expedition, met at Henry's Fork of the Green River. During the next 15 years, trapping activities intensified in the Upper Green River Basin and trading company rendezvous became more frequent in the area. The area was visited by Captain John C. Fremont in 1842 and 1843, in part to map the Oregon Trail. While in the area, he noted some of the extensive coal deposits, a fact which he reported to his superiors upon returning to the East. Captain Howard Stansbury, during the course of an 1852 survey for the railroad, also noted and later reported substantial coal seams near the current site of Rock Springs.

From 1836 through the 1870s, countless westbound settlers passed through northwest Sweetwater County. These settlers were guided through South Pass and across southwest Wyoming by the knowledge gained by the numerous fur trappers and traders who had frequented the area prior to the arrival of the wagon trains. Other

Figure 3a: Sweetwater County On-Line Data Base

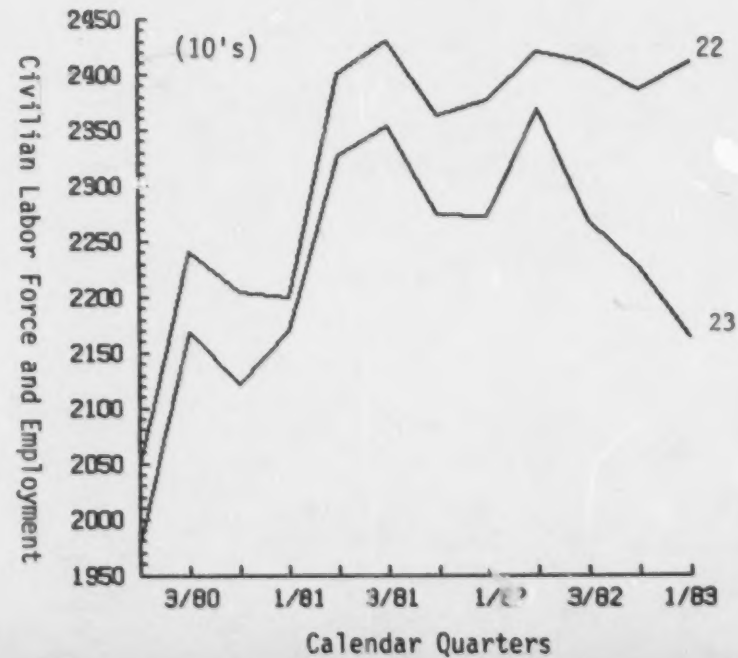
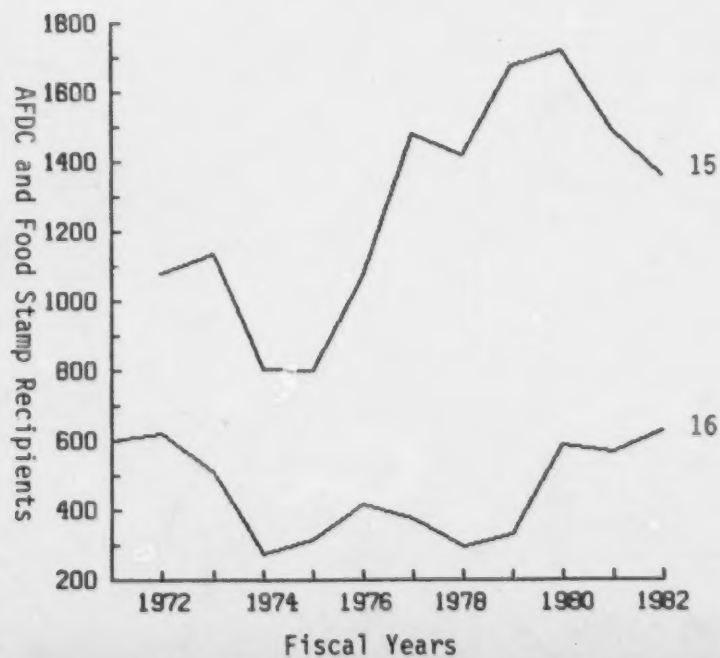
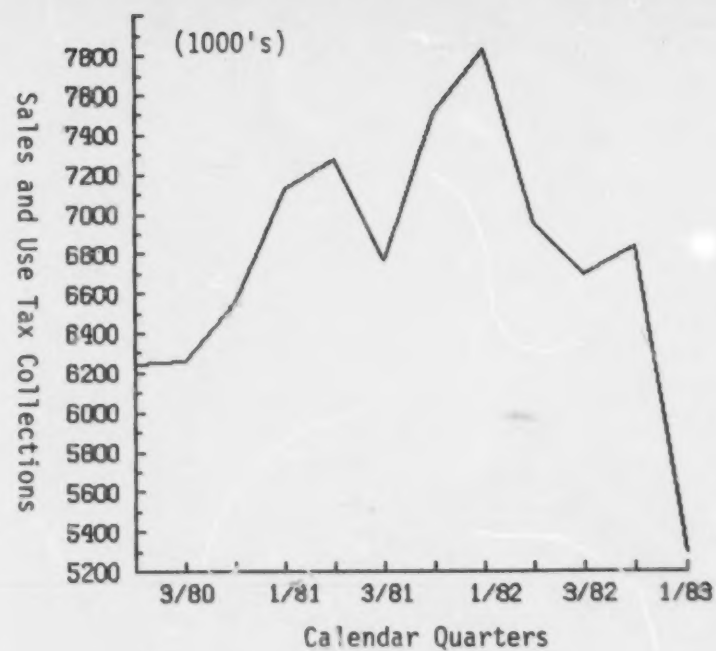
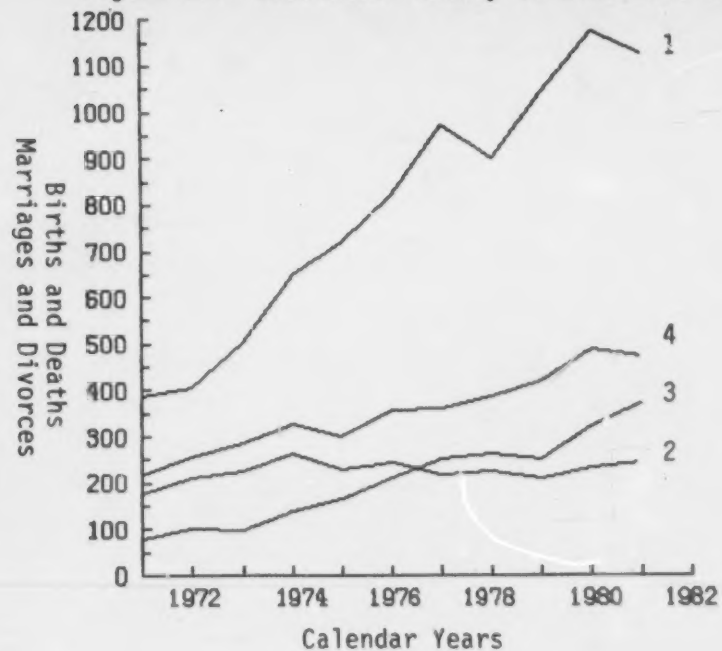


Figure 3b: Sweetwater County On-Line Data Base

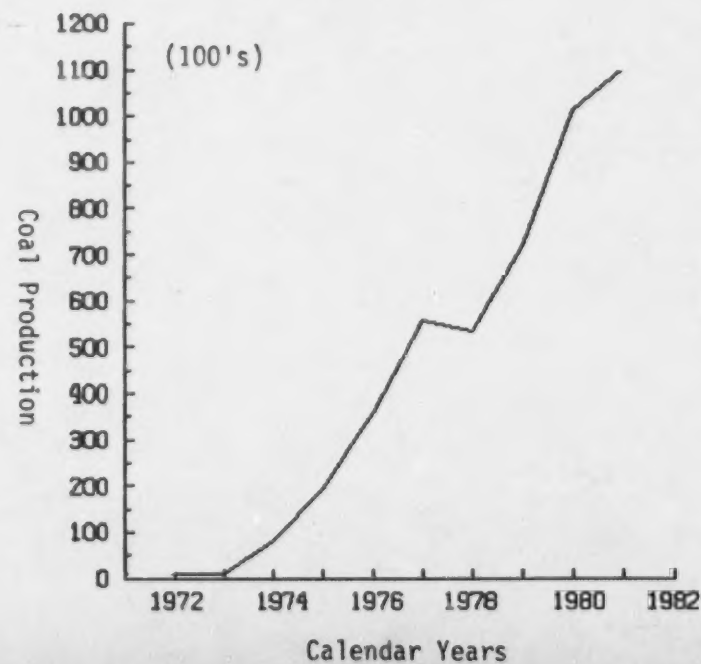
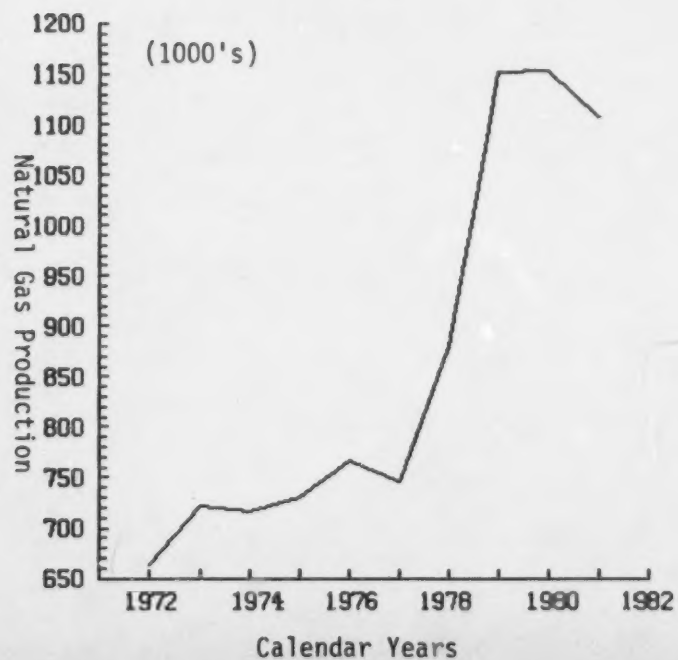
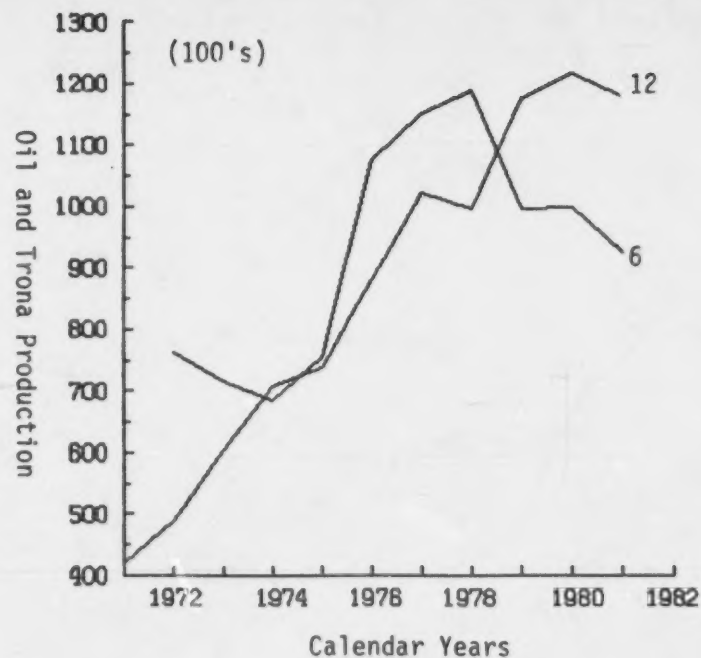
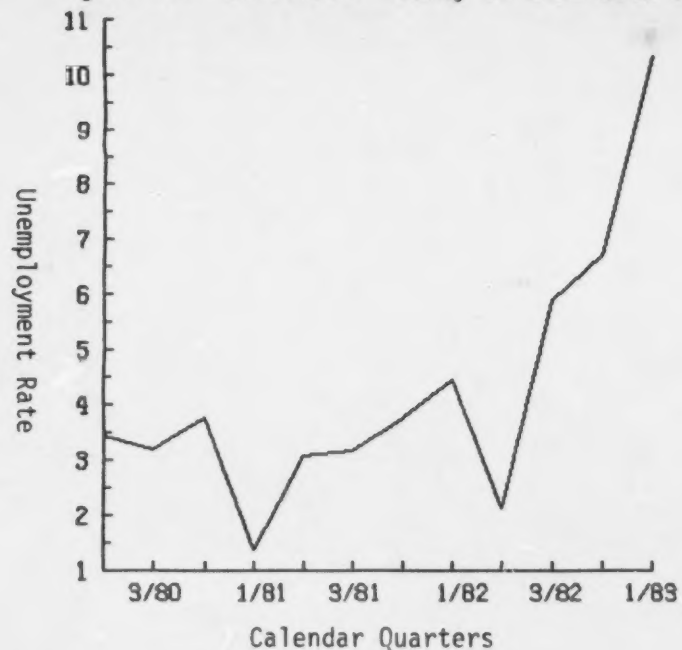


Table 1: Sweetwater County Profile

Calendar Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1. Births	388.	407.	502.	649.	722.	821.	974.	901.	1045.	1176.	1126. ¹	INA
2. Deaths	178.	209.	227.	261.	229.	243.	218.	226.	210.	234.	243. ¹	INA
3. Divorces	79.	100.	99.	140.	166.	209.	250.	262.	252.	323.	372. ¹	INA
4. Marriages ²	216.	257.	287.	325.	302.	355.	359.	387.	422.	488.	472. ¹	INA
5. Population ²	19200.	21200.	20600.	26600.	30400.	31600.	33700.	36500.	38700.	41723.	44736.	47007
6. Oil Production (HBBL)	INA	76299.	71402.	68444.	75562.	107640.	115276.	118838.	99591.	99835.	92705.	INA
7. Valuation of Oil Production (H\$)	INA	260022.	284194.	426583.	575624.	952436.	1021564.	1211017.	1178485.	1799346.	3179440.	INA
8. Natural Gas Production (HCMF)	INA	662793.	721616.	715858.	730216.	766602.	745917.	878983.	1150870.	1153504.	1107570.	INA
9. Valuation of Natural Gas Production (H\$)	INA	100193.	132723.	176783.	232965.	373322.	528981.	786949.	1568456.	2649892.	3188354.	INA
10. Coal Production (HST)	INA	913.	1035.	8165.	19379.	35808.	55823.	53497.	71919.	101383.	110030.	INA
11. Valuation of Coal Production (H\$)	INA	2629.	3808.	34806.	105228.	230318.	359184.	407385.	728638.	1289499.	1714519.	INA
12. Trona Production (HST)	42037.	48935.	60300.	70606.	73798.	88006.	102156.	99742.	117720.	121592.	117877.	INA
13. Valuation of Trona Production (H\$)	INA	171273.	227933.	335379.	442787.	616042.	786601.	797939.	1088909.	1389255.	1474176.	INA
14. Trona Prices (\$/ST)	INA	4.	4.	5.	6.	7.	8.	8.	9.	12.	13.	INA
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
15. AFDC Recipients	INA	1078.	1134.	805.	800.	1069.	1477.	1419.	1673.	1719.	1489.	1359.
16. Food Stamp Recipients	596.	616.	507.	271.	312.	411.	375.	294.	329.	585.	562.	625.
17. AFDC Payments (\$)	INA	159986.	170311.	109645.	129950.	198861.	303055.	288831.	378981.	431780.	375526.	403612.
Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
18. Hotel, Motel, & Camp Sales & Use Tax (\$)	200942.	248156.	179157.	176067.	189050.	254882.	190549.	193174.	185742.	271131.	156017.	110249.
19. Total Sales & Use Tax Collections (\$)	6238237.	6255722.	6554088.	7131357.	7278281.	6765983.	7511194.	7831434.	6950470.	6699241.	6839704.	5297847.
20. Liquor Sales (\$)	683854.	847212.	1050285.	650100.	747585.	782469.	1069275.	737573.	862392.	724540.	976079.	637889. ³
21. Gasoline Gallonage (TGL)	10024.	11963.	10098.	8898.	10545.	11584.	8798.	7367.	9957.	10593.	8038.	6000.
22. Civilian Labor Force	20485.	22403.	22045.	21999.	24003.	24292.	23624.	23770.	24199.	24105.	23864.	24110.
23. Employment	19777.	21687.	21217.	21697.	23270.	23526.	22734.	22717.	23687.	22690.	22267.	21629.
24. Unemployment	708.	716.	828.	302.	732.	767.	889.	1054.	511.	1416.	1597.	2481.
25. Unemployment Rate	3.5	3.2	3.8	1.4	3.1	3.2	3.8	4.4	2.1	5.9	6.7	10.3

¹Provisional data from the Wyoming Department of Public Health, Division of Vital Statistics.²1971 through 1979 are estimates made by the U.S. Bureau of the Census, not an actual count as in 1980. 1981 and 1982 are estimates made by the Department of Administration and Fiscal Control.³Estimate based on trend and January data.

Sources: Series 1-4: Wyoming Department of Public Health, Division of Vital Statistics. "Vital Statistics." Published yearly.
 Series 5: Regional Economics Information System, Bureau of Economic Analysis. Population data included in table of "Personal Income by Major Sources."
 Series 6-14: Annual Report: Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal year report.
 Series 15-17: Wyoming Division of Public Assistance and Social Services. Management Information and Statistical Report. Published biannually.
 Series 18: Sales and Use Tax Summary by County. Hotel, Motel, and Camp Sales Tax Collections. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.
 Series 19: Net Collections by Business Class by County. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.
 Series 20: Sales by County-City. Wyoming State Liquor Commission. Published monthly.
 Series 21: The Gasoline Gallonage Report. Petroleum Association of Wyoming. Gasoline consumption by county. Published monthly.
 Series 22-25: Employment Security Commission of Wyoming. Labor Force Trends. Published quarterly.

major east-west routes, including the Overland and Cherokee Trails, crossed the southern part of present-day Sweetwater County. A number of stations were constructed at locations such as Dug Springs, Black Buttes, Barrel Springs, Point-of-Rocks, Rock Springs, and Green River to service the Overland Stage Line, and briefly, the Pony Express.

With the arrival of the railroad, a market for the area's coal developed. The decision by the Union Pacific (UP) Railroad to build the line along the approximate route of the Overland Trail was influenced by the availability of coal near Hanna (now in Carbon County) and Rock Springs. The area's first coal mine was opened in 1866 by Archibald and Duncan Blair along Bitter Creek. Another coal mine was opened near Rock Springs in 1868 by the Quealy Brothers and Thomas Wardell. The area's economy developed rapidly around the railroad industry. Green River became a UP division point and thus a place where UP workers lived, rested, and spent much of their incomes. Additional mines opened to support the railroad, and Rock Springs' economy grew with the activity of the UP coal mines. A combination of labor strife and strike-breaking activities forged Rock Springs into an ethnic and racial melting pot. In 1871, striking Rock Springs coal miners were fired and were replaced by Scandinavian immigrants. Four years later, a wage cut caused another round of strikes and strike-breaking, this time with Chinese workers. By 1885, 331 Chinese miners were employed, compared to only 150 whites. Antagonism between the two groups grew steadily, finally culminating in the Rock Springs massacre of September 2, 1885. The local "Chinatown" was destroyed by fire, and 28 people perished. With the aid of federal troops, order was restored. Chinatown was rebuilt and lasted until the 1930s, when the last of the Chinese miners retired and returned to China.

Economic disaster struck the county in the early 1950s when railroads began a rapid switchover from coal-fired to diesel-powered locomotives. With no other source of local demand, and being too far from eastern markets, local mines such as the UP Rock Springs Mine closed in 1954. By 1958, the payroll for employees covered by unemployment insurance had fallen to two-thirds of its 1953 level. The population of Rock Springs fell from 10,857 in 1950 to 10,371 in 1960. Discovery and accelerated development of the county's substantial reserves of trona (natural soda ash), oil, and natural gas were major factors in the eventual revival of the county's economy. These latter occurrences, along with a renewed demand for coal and the construction of the Jim Bridger Power Plant, put Rock Springs and Sweetwater County on the front pages of publications throughout the nation. The rapid, energy development-related growth of the early 1970s and associated problems (some real, some imagined) provided the basis for its notoriety as a western energy boomtown. The major economic events of the early 1970s and what followed will be discussed in greater detail later in this profile.

NATURAL RESOURCES

Minerals

The Wyoming Department of Economic Planning and Development (DEPAD) describes Sweetwater County as having one of the "healthiest mineral economies" in the state, and the only commercially producing trona deposit in the world. Between 1971 and the peak production year of 1980, taxable trona production grew 189.3 percent (see Table 1). By 1981, the recession's impact was beginning to be felt by the trona industry, as output fell by 3.2 percent compared to the previous year. In light of reported layoffs, it appears that the 1982 data, when reported, will reflect another reduction in output. However, with the pick-up in 1983 in the nation's housing and auto industries, the demand for glass, and thus the demand for trona, should rebound. Fifty-one percent of all soda ash is used to manufacture glass.

Uranium is also present, but a 5-year delay in construction of power plants which had contracted to buy uranium from the Red Desert Mine and Mill forced a shutdown of Wyoming's largest uranium mining complex in March 1983.

Fossil Fuels

Oil, coal, and natural gas all play a major role in the county's economy. Oil production accounted for 17 percent of the county's 1982 assessed valuation. Output peaked in 1978, with 55.8 percent more being produced than in 1972. By 1981, oil production had fallen 22.0 percent from its 1978 peak. Nevertheless, the assessed valuation of the oil output rose 162.5 percent during that time. While no one can be sure what prices will do in the next 4 to 5 years, new production from the Brady Field and other recent discoveries should, according to DEPAD, at least maintain current production levels during that time.

Sweetwater County is the state's largest natural gas producer. Between 1972 and 1980, taxable output increased 74.0 percent. Although output fell 4.0 percent between 1980 and 1981, recent discoveries in the western part of the county should allow production to increase through the 1990s. The assessed valuation of natural gas production rose continuously between 1972 and 1981, showing a hefty 20.3 percent increase between 1980 and 1981 even as production fell.

Coal production went from nearly zero at the beginning of the 1970s to more than 11 million tons in 1981, and the assessed value of the output grew even more rapidly. Despite the impact of the recent nationwide recession on coal production in Sweetwater County, the outlook is favorable. Warmer weather and a healthier national economy should increase the demand for electricity, helping both the Jim Bridger Power Plant and Mine, as well as mines which produce coal for shipment out of the county. The Stansbury Mine, shutdown on February 2, 1981, will re-open when the market improves, and another mine has been proposed in the Red Desert.

Oil shale is also abundant in Sweetwater County, and until the recent downturn in oil prices, commercial production was nearing economic feasibility. Given the unstable situation in the Middle East, it is conceivable that a large synfuels industry could develop in the county before the end of this century.

Land

Approximately 70 percent of the county's land area is owned by the Federal Government. Most of it is managed by the Bureau of Land Management and the Forest Service (Flaming Gorge National Recreation Area). The state owns 2.9 percent of the county's land, and private landowners control the remaining 27.1 percent of the land. Most of the private land originated as land grants by the Federal Government to the UP Railroad. The land was given away in a checkerboard pattern on both sides of the railroad.

Water

Sweetwater County's major water source is the Green River and its tributaries. The Green River is part of the Upper Basin of the Colorado River System. Making use of its water is subject to the 1922 Colorado River Compact. The Upper Basin states are entitled to 7.5 million acre-feet annually, of which 14 percent is Wyoming's share. Unfortunately, recent studies suggest that the annual allocation of 7.5 million acre-feet (maf) was based on streamflow data from an unusually wet period, and that in the long-run, 6.3 maf per year is all that can be provided. The Upper Basin's reservoir capacity of 32 maf provides a cushion, but eventually some or all of the Upper Basin states may suffer a reduction in allocations. Of more immediate concern to Wyoming's Upper Basin counties, including Sweetwater, are the Stage 2 and Stage 3 water projects which plan to tap Little Snake River water for Cheyenne and other eastern Wyoming cities. The Little Snake River is part of the Colorado River Upper Basin so that water withdrawn from it counts against Wyoming's share of Upper Basin water and thereby reduces the amount which can be withdrawn from the Green River and its tributaries in southwestern Wyoming.

Four reservoirs--Flaming Gorge, Fontenelle, Eden Valley, and Big Sandy--are of major importance to the county. The latter two are just south of the Sublette County line, while the former two are located largely outside the county. Together they provide county residents with such benefits as recreation, flood control, power, and irrigation. The Flaming Gorge Reservoir and surrounding National Recreation Area is important to the local tourist trade. In addition to the fine scenery, Flaming Gorge is renowned as one of the finest lake fisheries in the West.

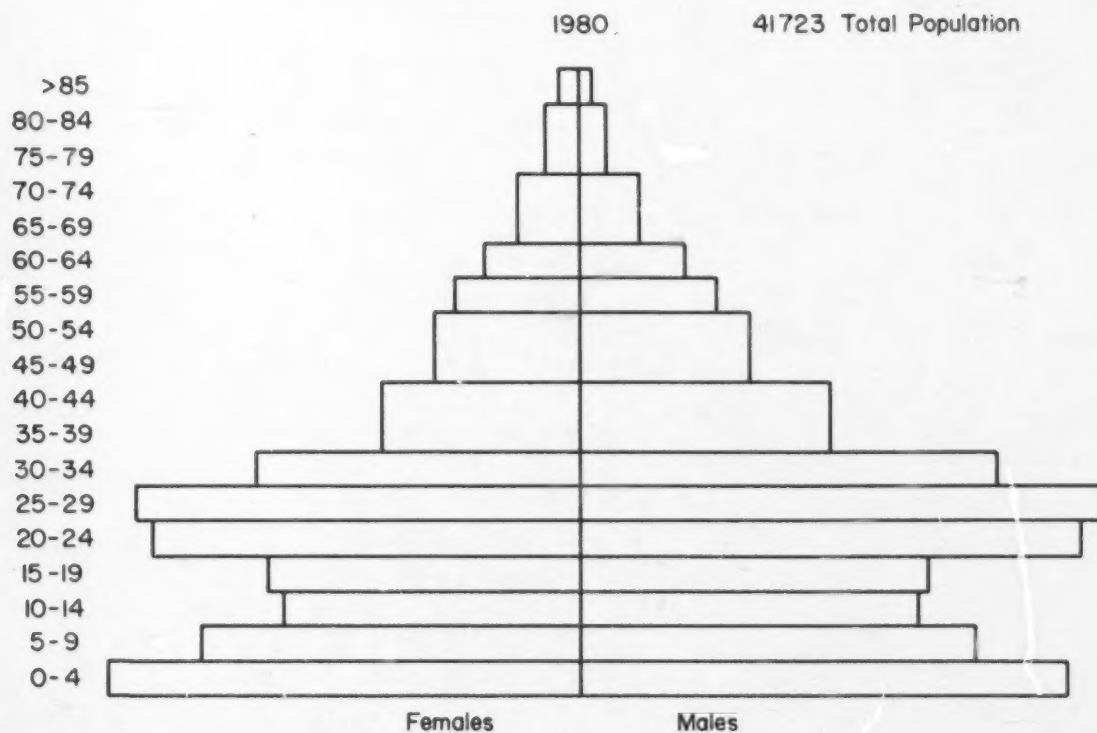
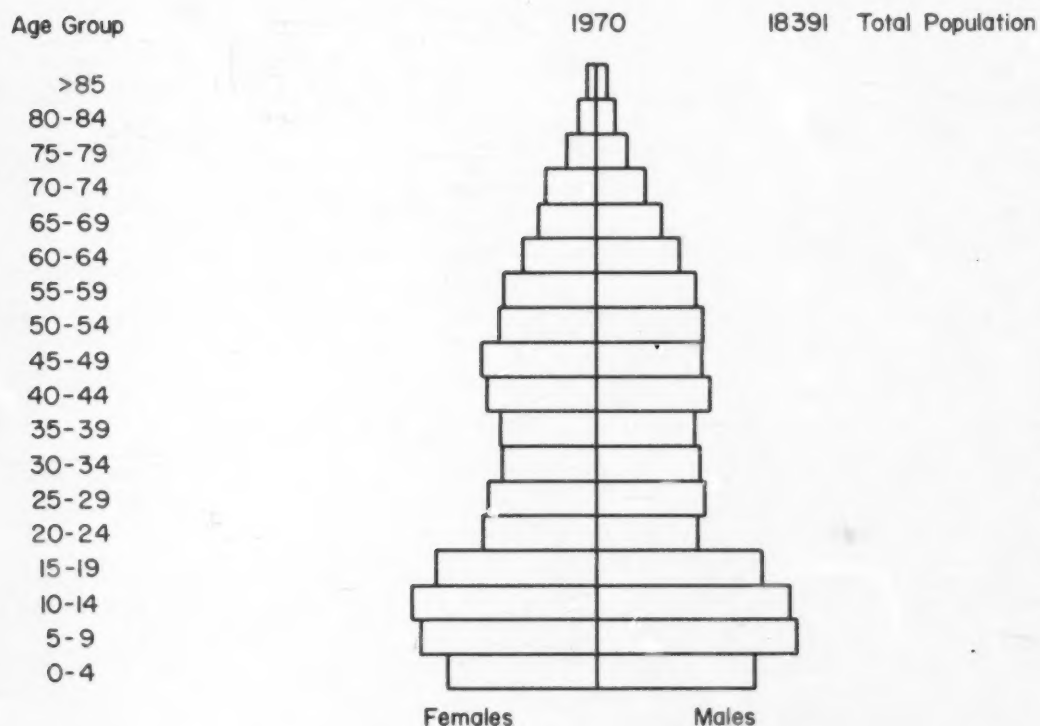
THE PEOPLE

The 1950s were an important transitional period for Sweetwater County. Rapid conversion of railroad locomotives from coal to diesel was a major shock to the local economy. The impact could have been much greater had it not been for initial development of the county's vast trona deposits. In 1952, the Food Machinery Corporation (FMC) built a \$15 million mine and processing plant at Westvaco, about 16 miles west of Green River. The net effect was a reduction in the county's population of 18.6 percent between 1950 to 1960. The 1950 population of 22,017 was not surpassed until the early 1970s. Modest growth (+2.6 percent) returned to the county during the 1960s. The major events behind the increase from 17,920 people in 1960 to 18,391 in 1970 were two new trona mining and processing facilities (Stauffer Chemical in 1962 and Allied Chemical in 1965), and the construction of a rail line in 1961-1962 to connect US Steel's Atlantic City Iron Mine with the UP mainline at Rock Springs.

The hectic, sometimes even frantic, pace of the 1970s was in direct contrast to the previous two decades. Population more than doubled (+126.9 percent), from 18,391 in 1970 to 41,723 in 1980. The growth was most rapid between 1973 and 1975. The extraordinarily rapid growth which occurred between 1973 and 1975 can be attributed to the simultaneous occurrence of several major economic events. The Arab oil embargo of 1973-74 increased oil and gas production, as well as exploratory efforts. The oil embargo, along with passage of the Clean Air Act, revived interest in the county's vast reserves of low sulfur coal. In 1974, another trona mine and refinery was constructed by Texas Gulf Sulfur Company near Granger. However, the most important single event during that time was the beginning of construction of the giant Jim Bridger Power Plant and coal mine. The combined effect of those events created a tremendous boom for the entire county. Some of the growing pains associated with the boom gained widespread publicity and provided Rock Springs in particular with a great deal of notoriety as a western energy boomtown.

Competition for scarce labor caused wages to increase, causing many workers to leave lower paying trade and service jobs for higher paying construction and mining jobs. Thus, just as the demand for local trade and personal services was growing rapidly, that sector of the local economy was shrinking. Another serious outgrowth of the boom was a sharp decline in the per capita availability of local government services such as education, fire and police protection, water and sewage treatment, and parks and recreation. Local governments faced three major problems in trying to keep up with the growing demand for their services. The first was the lead-time required to plan and construct major additions to the public capital stock. Perhaps more serious were the financing problems. While demand was greatest during a new project's construction phase, the project was not added to property tax rolls until it was

Figure 4: Sweetwater County; Age by Sex in 5-year Age Groups; 1970, 1980.



completed and in operation. Thus, larger tax receipts and higher bonding limits were not available when needed most. The third problem was that even when finally completed, the jurisdictions most heavily impacted by growth would not always receive the property tax revenues. In Sweetwater County, this problem was most acute when a project such as the Jim Bridger Power Plant was taxed by the county but a majority of its workers resided in Rock Springs. The rapid growth, together with the constraints faced by local governments, prompted a decline of 41.9 percent in per capita municipal (Rock Springs) infrastructure (PCMI) between 1966 and 1974. Some new educational facilities boosted PCMI 21.9 percent between 1974 and 1975.

Declining PCMI and a shrinkage of the local economy's trade and service sectors were major factors behind the county's serious worker turnover problems, which in turn caused lower-than-expected labor productivity. Several illustrations of the seriousness of the turnover problem have been published. According to an article appearing in the September 1976 issue of *Shale Country*, turnover was so high, and productivity was so low, that the construction labor force of the Jim Bridger Power Plant peaked at 3,230 in 1973, instead of at 920 in 1974 as had been originally planned. An August 12, 1981 *Wall Street Journal* article by William Blundell stated that: "In one Rock Springs mining operation, the entire workforce had to be replaced in a year, and on one construction project, turnover cut productivity to about one-third of what was expected." In a recent study (Moan et al., 1982), Steve Schmitz of the Colorado Division of Mineral and Energy Impact is quoted as saying that high worker turnover and poor job performance cost industry in Rock Springs \$72 million.

Although the basic industries continued to expand after 1975, the pace slowed somewhat. Much of the growth that occurred was actually due to an expansion of the service and trade sectors which were gradually catching up to the

heightened demands created by the boom. As the 1981 and 1982 population estimates indicate, growth continues to appear robust. The data for births and welfare recipients reflect the rapid population growth and fully employed economy of 1973-75. However, as the boom subsided, the welfare rolls grew rapidly (at least through 1980). The number of AFDC recipients increased 114.9 percent between 1975 and 1980, but from 1980 to 1982 their numbers fell 21.5 percent. Deaths, divorces, and marriages were less perceptibly affected by the boom. In fact, more deaths were recorded in 1974 than in any year since. As Figure 2 clearly indicates, the lion's share of the growth between 1970 and 1980 occurred in the youngest age groups. Consequently, the relative constancy in the number of annual deaths is not that surprising. Even though births exceeded deaths by a substantial amount during the 1970s, more than 75 percent of the net growth during that decade was the result of net in-migration.

THE ECONOMY

Total personal income (Table 2) increased even more rapidly from 1970 to 1980 than the combined effect of population growth and inflation would lead one to expect. With the price level and Sweetwater County's population both increasing by a factor of slightly more than two between 1970 and 1980, a five-fold increase in personal income would be reasonable. However, it actually increased by a factor of more than 8.5. Strong growth in per capita income (PCI) is suggested by such an increase. Indeed, that was the case. Between 1970 and 1980, the county's PCI rose 229.1 percent, or more than three times its 1970 value. In 1970, the county's PCI was 94.3 percent of Wyoming's, while in 1980 it was 109.7 percent of Wyoming's PCI. By 1981, the county's PCI had risen another 12.9 percent or 114 and 127 percent of Wyoming's PCI and the nation's PCI, respectively. Not surprisingly, the sectors showing the strongest growth during the 1970s were construction and mining, together accounting for 58.61

Table 2: Personal Income by Major Source (Thousands of Dollars)*

Source	Wyoming 1980		Sweetwater County 1980		Sweetwater County 1970	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	99980	2.46	1068	.23	1644	3.00
Ag Serv., For., Fish, and Other	13143	.32	228	.05	(L)	--
Mining	1015626	24.99	202917	43.02	16190	29.55
Construction	464577	11.43	73553	15.59	3701	6.75
Manufacturing	196636	4.84	9488	2.01	2080	3.80
Transportation & Public Utilities	415770	10.23	46960	9.96	7789	14.22
Wholesale Trade	193476	4.76	15652	3.32	1275	2.33
Retail Trade	38224	9.41	33587	7.12	5872	10.72
Finance, Insurance & Real Estate	137457	3.38	6458	1.37	1124	2.05
Service	458014	11.27	41296	8.75	6144	11.21
Government	687257	16.91	40505	8.59	8937	16.31
Total	4064180		471712		54792	

* REIS Data

(L) Less than \$50,000; data are included in totals

percent of the county's 1980 personal income, compared to 36.3 percent in 1970.

As in most other Wyoming counties, the nationwide recession was beginning to be felt in earnest in Sweetwater County during the last year. That is indicated most clearly by the sales and use tax collection data and by the recent increases in the unemployment rate. In less than a year, the unemployment rate has risen from 2.1 percent (during 2/82) to 10.3 percent (during 1/83). At least the March 1983 unemployment rate of 10.5 percent is down from the 10.8 percent rate recorded in February. Sales and use tax collections during 1/83 were off 32.4 percent compared to 1/82. April collections also indicated a significant drop-off from previous months.

OUTLOOK

Beyond the immediate problems created by the national recession, the outlook for Sweetwater County is quite good. Revival of the nation's housing and auto industries, coupled with an end to current inventory liquidations, signal good times for the county's key trona and energy industries. The still vast natural resource base of the county stands ready to serve the needs of an expanding national economy. Should another upheaval in the Middle East drive up oil prices, something like an energy boom could occur again as industry rushes to develop Sweetwater County's oil, natural gas, coal, and oil shale reserves. However, given what was learned from the events of the early 1970s, many of the growing pains experienced then are not likely to be repeated.

John Merrifield and Ruth Tebbutt, IPR

Sources:

Blundell, William E. "Easing the Strain: Firms Seek to Avert Boomtown Problems by

Providing Services." Wall Street Journal, V. 198, #30, p. 1 (August 12, 1981).

Edmonds, C. "Rock Springs: 'Sinking City' on the Rise," Shale Country, pp. 10-13 (September, 1976).

Gerber, Larry, Rimpo, Tim, and Yates, Jeanne. An Economic Base Analysis of Sweetwater County, Wyoming, Sweetwater County Association of Governments (September, 1980).

Gilmore, J.S. and Dugg, H.K. "The Sweetwater County Boom: A Challenge to Growth Management," Denver Research Institute, University of Denver (1974).

Moen, Elizabeth, et al. "Quality of Life, Expectations of Change, and Planning for the Future in an Energy Production Community," University of Colorado, Boulder, CO (January, 1982).

Rocky Mountain Energy Company. Baseline Socio-Economic Descriptions and Projections: Sweetwater and Carbon Counties, Wyoming (February, 1981)

Stuart/Nichols Associates. Impact Analysis: Sweetwater County, Wyoming 1978-1985 (October 31, 1978).

Wyoming Executive Department. Governor's Resource Management Tour: June 26-28, 1979.

Wyoming Industrial Development Corporation. Economic Blueprint Component of Public Investment Plan: Green River, Wyoming, State of Wyoming, Department of Economic Planning and Development (1975).

_____. Economic Blueprint Component of Public Investment Plan: Rock Springs, Wyoming, State of Wyoming, Department of Economic Planning and Development (1975).

#

Sublette County Profile

PHYSICAL CHARACTERISTICS AND CLIMATE

Sublette County is in west-central Wyoming (see Map 1) with Lincoln County to the west, Sweetwater County to the south, Fremont County to the east, and Teton County to the north. Pinedale, with a 1980 population of 1066, is the county seat. The next largest towns are Big Piney (530 people in 1980) and Marbleton (537 people in 1980).

The topography is mostly mountainous, with some high plains and rolling hills in the south-central part of the county. Most of the county's land area lies at least

7,000 feet above sea level. One of the three major mountain ranges bordering the county is the Wind River Range to the east. The Continental Divide follows the Wind River Range and happens to also form the dividing line between Sublette and Fremont County. Along the divide, elevations approach 14,000 feet in many places, including Wyoming's highest summit, Gannett Peak, 13,804 feet above sea level. On the east-facing side of the range is one of the largest glacier-covered areas in the United States, outside of Alaska. Part of the watersheds of each of three major river basins - the Colorado, Missouri, and Columbia Rivers - can be found surrounding a single mountain within the Wind

Figure 5a: Subilette County On-Line Data Base

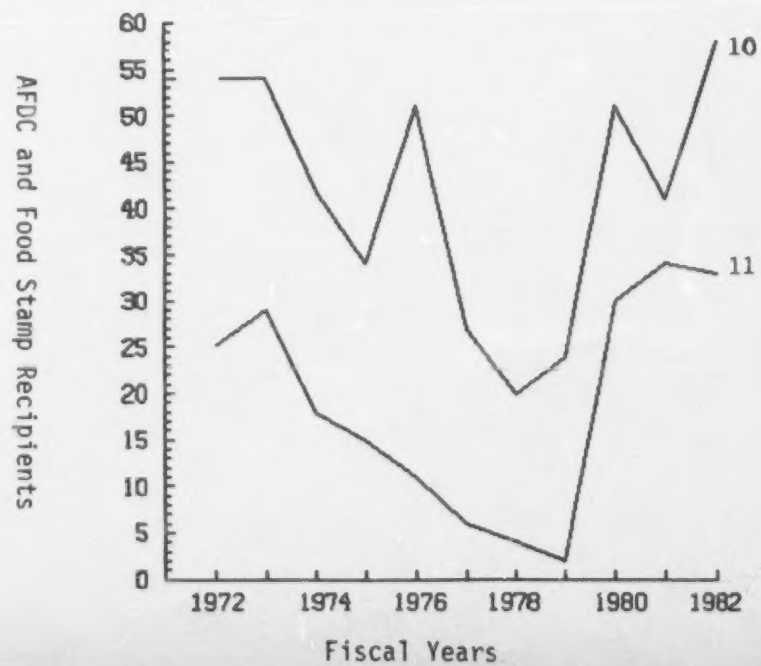
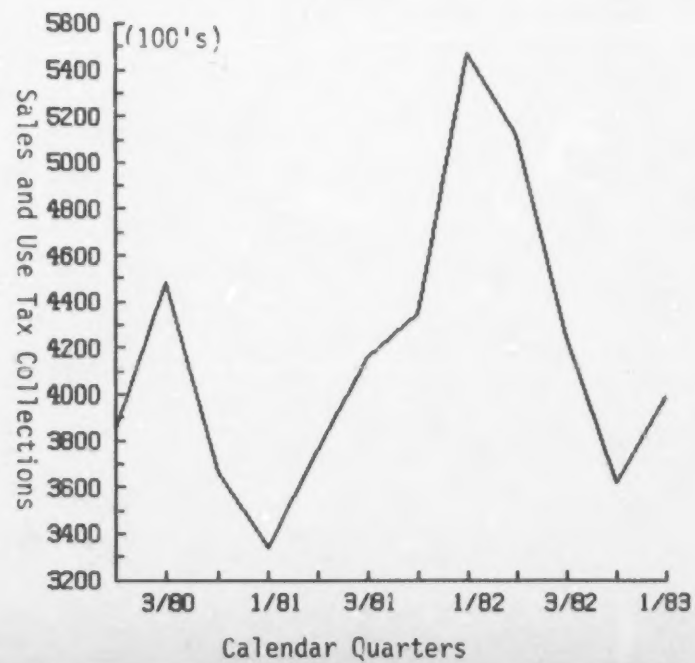
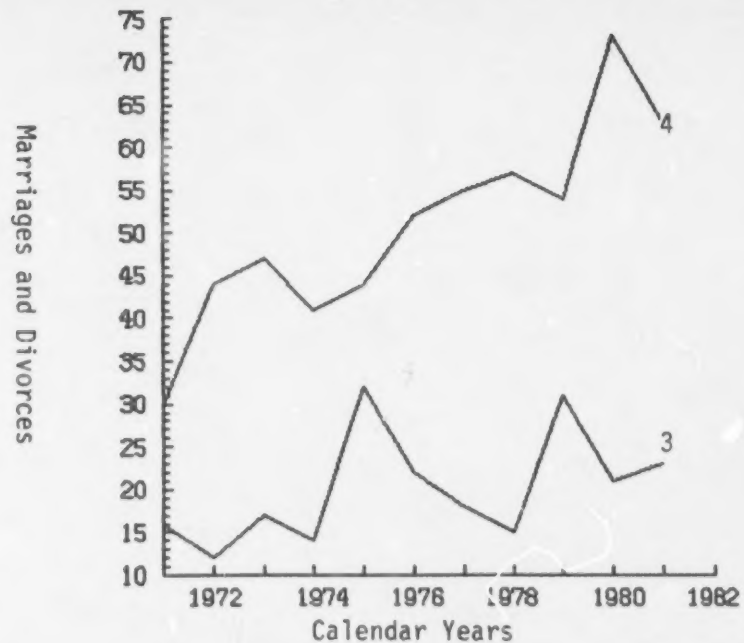
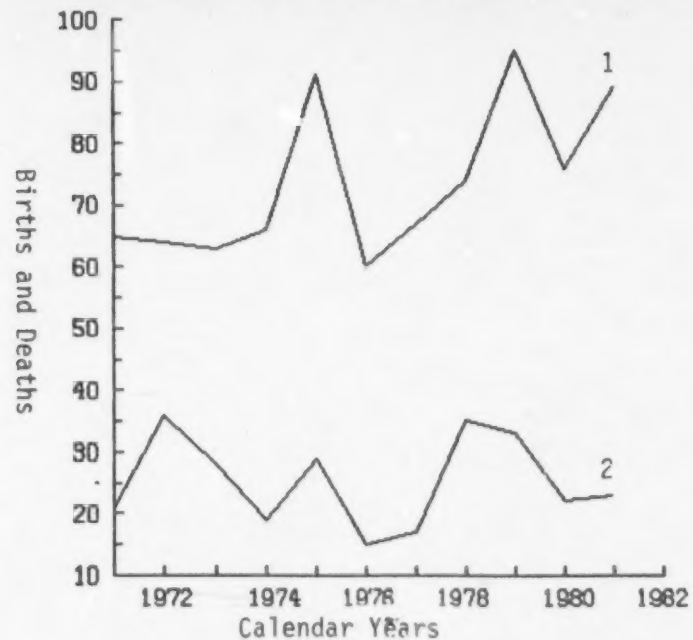


Figure 5b: Sublette County On-Line Data Base

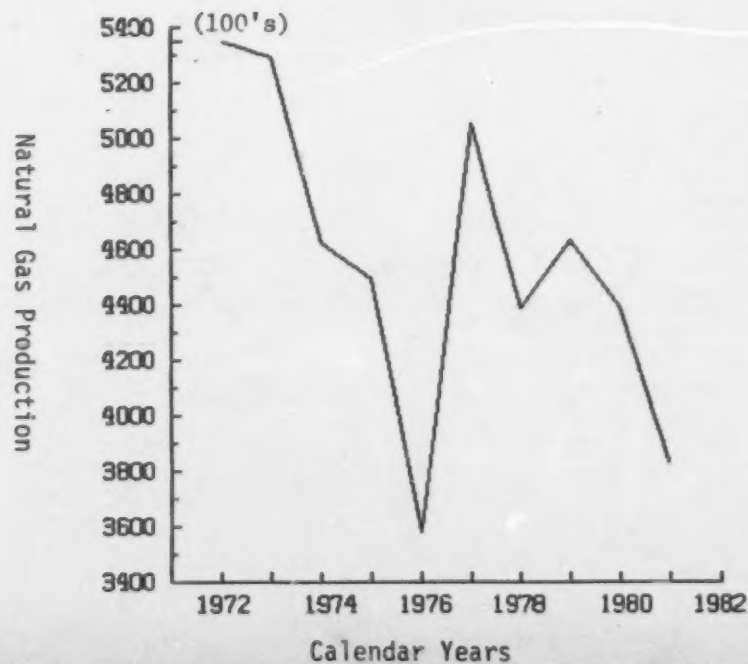
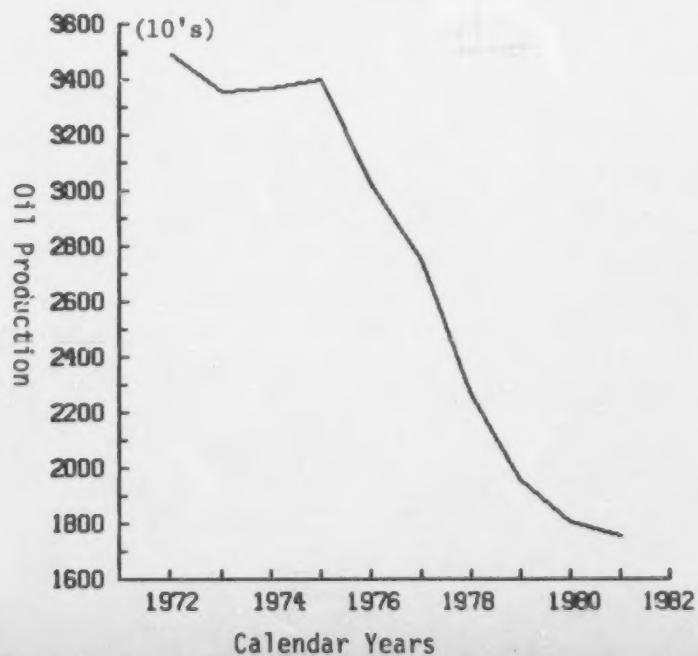
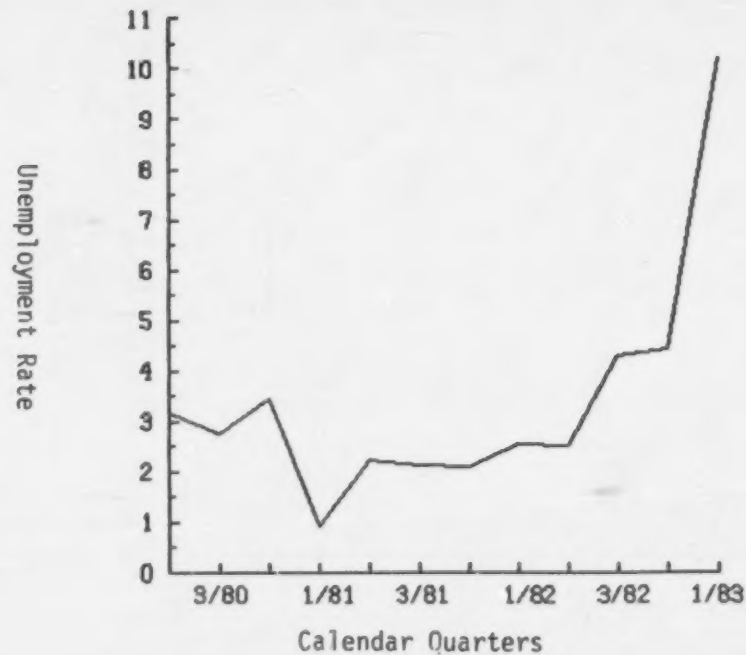
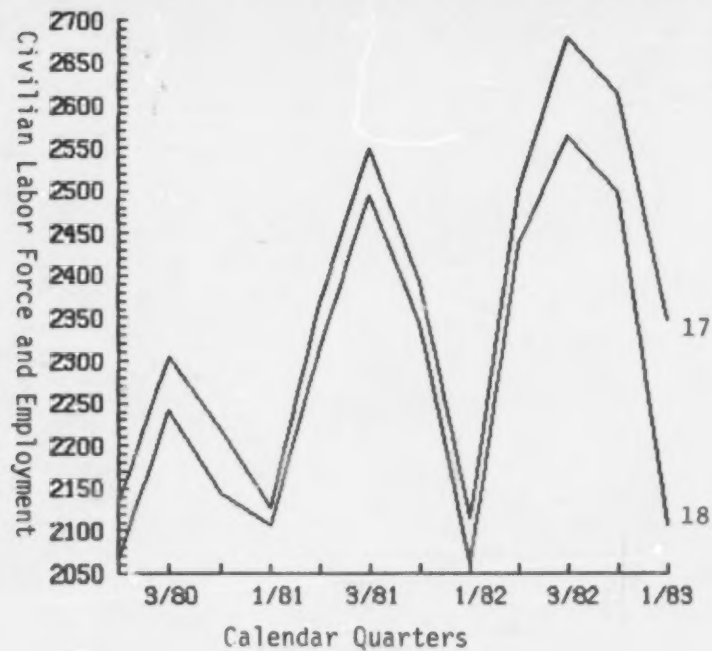


Table 3: Sublette County Profile

Calendar Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1. Births	64.	63.	66.	91.	60.	67.	74.	95.	76.	89. ¹	INA	INA
2. Deaths	21.	36.	28.	19.	29.	15.	17.	35.	33.	22.	23. ¹	INA
3. Divorces	16.	12.	17.	14.	32.	22.	18.	15.	31.	21.	23. ¹	INA
4. Marriages ²	30.	44.	47.	41.	44.	52.	55.	57.	54.	73.	63. ¹	INA
5. Population	3700.	3800.	3800.	3800.	4100.	4100.	4400.	4300.	4700.	4548.	4584.	4626.
6. Oil Production (HBBL)	INA	34928.	33539.	33697.	33973.	30213.	27486.	22630.	19514.	18020.	17520.	INA
7. Valuation of Oil Production (H\$)	INA	121130.	143579.	239612.	282670.	251186.	229766.	198964.	246578.	376733.	608075.	INA
8. Natural Gas Production (HCMF)	INA	534909.	529567.	462566.	449094.	357962.	504692.	438872.	462914.	438662.	381665.	INA
9. Valuation of Natural Gas Production (H\$)	INA	90726.	124199.	121868.	145937.	183737.	363023.	389177.	490549.	585218.	645661.	INA
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
10. AFDC Recipients	INA	54.	54.	42.	34.	51.	27.	20.	24.	51.	41.	58.
11. Food Stamp Recipients	25.	25.	29.	18.	15.	11.	6.	4.	2.	30.	34.	33.
12. AFDC Payments (\$)	INA	8065.	8087.	5722.	4272.	7610.	7488.	1491.	4673.	11334.	9290.	17040.
Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
13. Hotel, Motel, & Camp Sales & Use Tax Collections (\$)	5396.	15458.	8452.	5202.	7970.	19189.	11133.	9103.	10459.	17124.	10887.	8273.
14. Total Sales & Use Tax Collections (\$)	385167.	448238.	366205.	333898.	376026.	416037.	434621.	546818.	511785.	425112.	361885.	398333.
15. Liquor Sales (\$)	76465.	108296.	114895.	72491.	95709.	132672.	132810.	80318.	102220.	114072.	117137.	63667.
16. Gasoline Gallonage (GL)	947658.	1557926.	1152712.	793536.	1118992.	1510696.	1122043.	919227.	1032750.	1483919.	1028501.	780000.
17. Civilian Labor Force	2134.	2305.	2219.	2127.	2368.	2548.	2392.	2116.	2499.	2677.	2613.	2346.
18. Employment	2067.	2242.	2143.	2107.	2314.	2494.	2342.	2062.	2436.	2562.	2497.	2106.
19. Unemployment	67.	63.	76.	20.	53.	54.	50.	54.	63.	115.	116.	240.
20. Unemployment Rate	3.2	2.7	3.4	0.9	2.3	2.1	2.1	2.6	2.5	4.3	4.4	10.2

¹Provisional data from the Wyoming Department of Public Health, Division of Vital Statistics.²1971 through 1979 are estimates made by the U.S. Bureau of the Census, not an actual count as in 1980. 1981 and 1982 are estimates made by the Department of Administration and Fiscal Control.³Estimate based on trend and January data.**Sources:**

Series 1-4: Wyoming Department of Public Health, Division of Vital Statistics. "Vital Statistics." Published yearly.

Series 5: Regional Economics Information System, Bureau of Economic Analysis. Population data included in table of "Personal Income by Major Sources."

Series 6-9: Annual Report: Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal year report.

Series 10-12: Wyoming Division of Public Assistance and Social Services. Management Information and Statistical Report. Published biannually.

Series 13: Sales and Use Tax Summary by County. Hotel, Motel, and Camp Sales Tax Collections. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.

Series 14: Net Collections by Business Class by County. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.

Series 15: Sales by County-City. Wyoming State Liquor Commission. Published monthly.

Series 16: The Gasoline Gallonage Report. Petroleum Association of Wyoming. Gasoline consumption by county. Published monthly.

Series 17-20: Employment Security Commission of Wyoming. Labor Force Trends. Published quarterly.

River Range. In addition, the range is famous for its numerous lakes (over 1,000), including Fremont Lake, Wyoming's deepest at 608 feet. The other two major mountain ranges are the Wyoming and Gros Ventre Ranges, west and north of the county, respectively.

Climatological conditions vary widely across the county with changes in elevation and aspect (the direction a slope faces). At the relatively lower elevations, where most county residents live, annual precipitation averages 11-17 inches, with the lion's share of that coming in the form of snow. The high elevations and other topographic factors hold temperatures down (35°F annual average) and limit the growing season to about 65 days, beginning in about mid-June and running through late August. One such topographic factor is the propensity for cold air to collect at night in the bottom of some of the high mountain valleys. Big Piney is in one such location, a fact which helped it attain a certain degree of notoriety for its low temperatures. On December 5, 1950, the *Denver Post* tagged it with the title, "America's Deep Freeze." At one time, the town was actually contemplating an official name change to North Pole, Wyoming (Casper Tribune Herald, 2/27/53). Although Pinedale's elevation of 7,175 feet tops Big Piney by 377 feet, Pinedale is slightly warmer. The annual average temperature is 37.2°F, with the January and July averages standing at 23.°F and 65°F, respectively.

HISTORY

Prior to the arrival of the Astor expedition in 1811, Indians, including members of the Crow, Shoshone, and Ute tribes, lived in the area, although for how long is not known. The Astor expedition entered the county via Union Pass, about 50 miles north of Pinedale. They also discovered and were the first to traverse South Pass, located in southwest Fremont County.

The activities of white men intensified as the fur trapping business boomed during the "Fur Era." The area's first fur trapping and trading company was led by General Ashley, who devised a rendezvous system to facilitate the acquisition of furs by trade from Indians and trappers. Most of the rendezvous were held along the Green River. Many famous trappers-traders-explorers found their way into Sublette County during that time. Among them were Jim Bridger, Kit Carson, "Broken Hand" Fitzpatrick, Jim Beckworth, and the five Sublette brothers. The county got its name from William, one of the five brothers.

Fur trading fell upon lean times with a decline in the demand for beaver pelts, and trapping and trading nearly ceased. The next white men and women to come to Sublette County were westbound immigrants following

various trails to Oregon, California, and Utah. For several years none of them stopped to settle, but in 1878 an initial permanent settlement did appear. The event marking the beginning of settlement was when D.B. Budd used the Pineys to winter his cattle. Other small cattle ranchers soon followed, and by 1888 enough of them had gathered there to allow Budd to found the town of Big Piney. The new town served as a ranch supply center. The livestock industry, including cattle and sheep, thrived there so that by 1913 another town, Marbleton, was founded by Charles P. Budd to compete with Big Piney. Settlement of Pinedale began in 1891, and it was officially incorporated in 1912.

The timber industry also flourished in the northern part of the county during the late 1800's and early 1900's. The area was ideal, because the timber needed by the railroads to make ties could be easily gotten from forest to railroad by dropping the logs into the Green River and fishing them out again at the town of Green River.

A few years after the county was officially created on February 15, 1921, an oil boom got underway in the southwestern corner of the county. The activity was centered about the towns of LaBarge and Calpet, just a few miles apart on opposite sides of the Lincoln-Sublette County boundary. LaBarge, in Lincoln County, for a time was known as "Tulsa" after the town in the heart of Oklahoma's oil-producing region. Calpet owes its name to the drilling activity undertaken there by California Petroleum, which was later acquired by Texaco.

Oil was sufficiently abundant to prompt the construction of a refinery, and to this day oil is still being produced from the Calpet field. The field is also used to research the cost-effectiveness of steam injection as a method of getting a larger percentage of an oil field's oil out of the ground. After an extended lull, widespread drilling and exploratory activity began again in 1956, when higher prices for natural gas prompted Pacific Northwest Pipeline to re-open and increase development of the Big Piney Natural Gas Field, which had been shutdown since 1938.

NATURAL RESOURCES

Minerals

Several minerals are known to exist in the mountains of Sublette County. They include uranium, gold, iron, copper, silver, bentonite, limestone, and phosphate. Sulfur and helium are also known to exist in conjunction with the county's natural gas fields. However, with much of the county's mountainous regions in or near wilderness or wilderness study areas, and the presumed low grade of the ores, it is unlikely that any significant mineral mining operations will get underway in the foreseeable future.

Fossil Fuels

From the late 1950's until very recently, very little oil and gas exploration had been

conducted in Sublette County. Known reserves are significant, and production and development of those deposits is ongoing. The great importance of oil and gas production is suggested by the fact that together they account for 80 percent of the county's 1982 assessed valuation. In 1981, 29 fields with a combined total of 674 wells were producing oil or gas. Oil production has fallen sharply (-49.8 percent) between 1972 and 1981, but the rate of decrease has at least slowed. It fell only 2.8 percent between 1980 and 1981. Projections by the Department of Economic Planning and Development (DEPAD), suggest a continuation of the downward trend, with a total drop of 42.9 percent between 1981 and 1984. Annual taxable production is expected to level off at about one million barrels in 1984, 1985, and 1986. That projected trend would be reversed if any substantial new fields are discovered by way of ongoing exploratory drilling in the Overthrust Belt.

Natural gas production also fell off sharply (-28.7 percent) between 1972 and 1981, but unlike oil production, the decline was not continuous. Between 1976 and 1981, output registered a number of sizable ups and downs. Despite the downturns in production, higher prices for both oil and gas caused significant gains in the assessed valuation of production. Between 1972 and 1980 assessed valuation grew 402.0 percent and 611.7 percent for oil and gas, respectively.

The outlook for the rest of the 1980's for oil, and especially natural gas, production and valuation is very uncertain. However, the uncertainty concerns not whether there will be an increase or decrease, but how large of an increase will eventually be seen.

Most imminent is the proposed Riley Ridge Natural Gas Project. A draft environmental impact statement (EIS) on the project was just released. Though two of the three or four natural gas "sweetening" plants have been delayed by the current economic hard times and uncertainty about future government natural gas pricing policies, development of the massive gas field, discovered over 20 years ago, is likely to pump millions of dollars into Lincoln County and Sublette County later this decade. Still on schedule is the Exxon proposal, which had been to locate two 0.6-billion-cubic-feet-per-day (bcfd) plants in southwest Sublette County, near Big Piney. However, the just-released draft EIS states as its preferred alternative that the two proposed smaller plants be consolidated into a single 1.2 bcfd facility to be located just across the Lincoln County line at Shute Creek. The draft EIS also suggested that the now-delayed facilities proposed by American Quasar and Northwest Pipeline be located at Buckhorn, about 12 miles southeast of Big Piney in Sublette County and at Opal in Lincoln County. Final decisions on plant

location will probably not be made until the end of this year. Regardless of the exact form eventually taken by development plans, it seems likely that the area which includes LaBarge, Big Piney, and Marbleton will become yet another of Wyoming's energy boom regions.

Coal is also present under much of the county's surface area. The thickest seams come closest to the surface in the western part of the county, and from time to time some small-scale mining has taken place, mostly for immediate local consumption. Extensive development of coal reserves for export from the county has been discouraged by the lack of rail transportation to take the coal to market.

Land

Over 80 percent of Sublette County's land area is publicly owned. The county's total land area of 4,916 square miles makes it Wyoming's sixth largest. The federal government owns 78.82 percent of Sublette County. Private landowners control 17.55 percent, and the state and local governments own the remaining 2.82 percent of the land. The lion's share of the federal land is managed by the U.S. Forest Service and by the Bureau of Land Management (BLM). The BLM, under the auspices of its asset management program, has identified 15 parcels of land totalling 157 acres which could be sold sometime during the 1984 federal fiscal year. Fifty-three percent of the county's land area is forested, most of it being in one of the three national forests (Bridger, Teton, Shoshone) which extend into the county.

Water

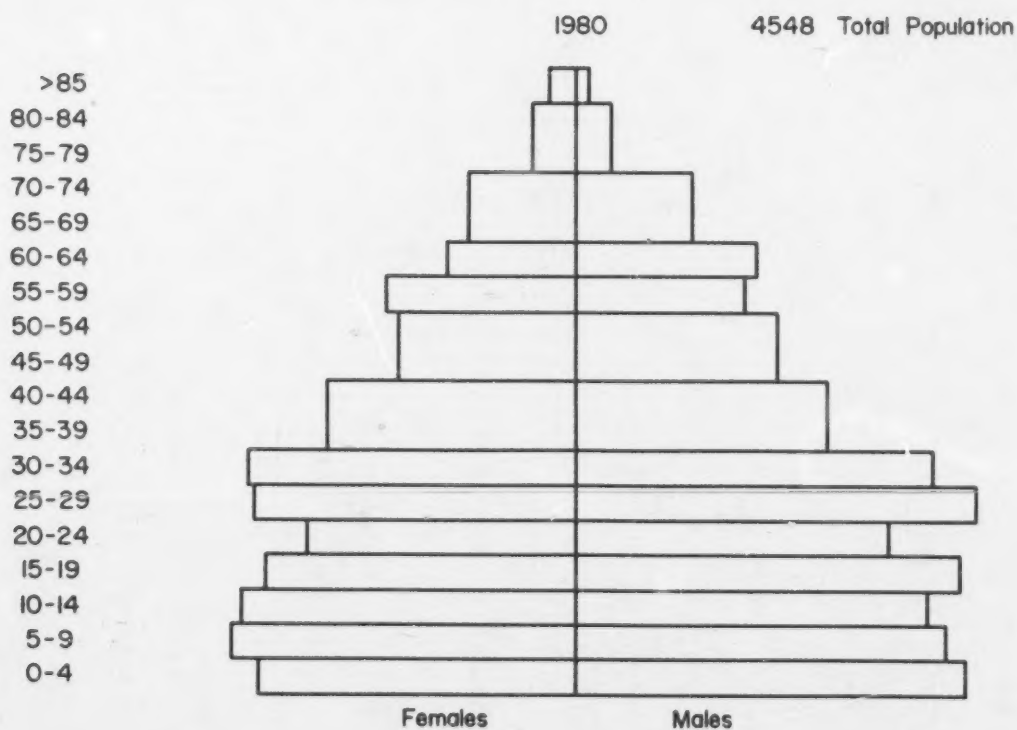
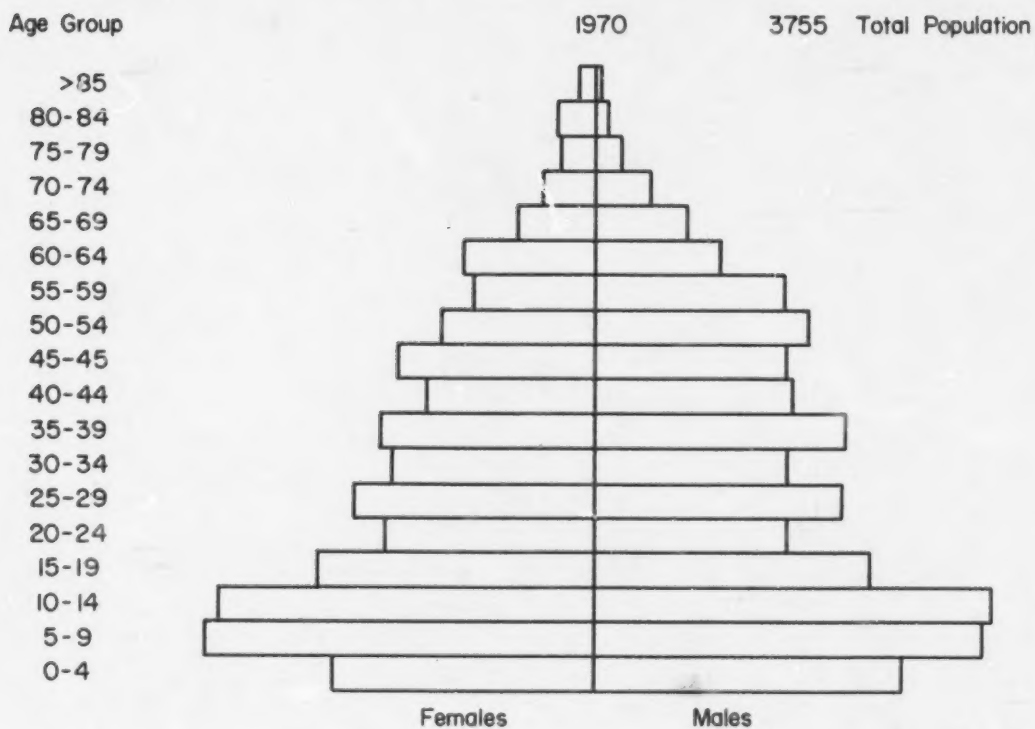
Sublette County is blessed with several major streams and rivers, thousands of natural lakes, and a number of man-made reservoirs. More than 25,000 acres are water-covered. The Green River, a major tributary of the Colorado River, begins in the mountains north of Pinedale, flows northwestward for approximately 25 miles, then makes a U-turn and flows southward into the Fontenelle Reservoir in Lincoln County. Early in the 1970's, two additional reservoirs (Kendall and New Fork Narrows) were proposed for the Upper Green River in Sublette County. However, local opposition to the proposed reservoirs was strong. Local residents feared that the local economy would suffer more from lost hunting and tourist revenues than would be gained from additional irrigation potential. Sublette County's 1982 total irrigated acreage of 168,198 acres ranked first in Wyoming even without the Kendall or New Fork Narrows projects.

Groundwater is also abundant. Drinkable water is generally available at depths up to 2,000 feet in the northern part of the county and 1,000 feet in the southern part. Except in Pinedale, where domestic water comes from Fremont Lake, all of the county's domestic water is obtained from groundwater.

THE PEOPLE

Between 1960 and 1970, there was virtually

Figure 6: Sublette County; Age by Sex in 5-year Age Groups, 1970, 1980.



no change in the county's population. Similarly, there was virtually no change in Wyoming's population during that decade. However, the population grew steadily throughout the 1970's, with net growth of 21.1 percent being recorded between the decennial census dates. While representing a substantial rate of growth, the 21.1 percent increase was barely more than half the growth rate for Wyoming. Contrary to the effect of growth on most Wyoming county age distributions, Sublette County's population actually grew older in the 1970's (Figure 6). In 1970 the median age of Sublette County residents was 26.9 years, 0.3 of a year less than the statewide median age. By 1980, the county's median age was up to 28.8 years, 1.7 years higher than for all of Wyoming. In the event that the Riley Ridge Project is not built, the growth trends observed during the 1970's and early 1980's are projected (by the state Department of Administrative and Fiscal Control) to continue. If the project should get underway, as does appear likely, there will be tremendous changes in the composition, as well as the size of the population. The original plan had called for a peak workforce of 3,000 to be on hand in 1985. With an average of as little as one dependent per worker and an indirect (or multiplier) effect on other sectors of the economy of a little more than 1.5, an additional 10,000 people would have to be accommodated by parts of Sublette, Lincoln, and Sweetwater Counties. A substantial share of that growth could be expected to occur in the Big Piney - Marbleton area within Sublette County. Recently announced delays in the plans of Northwest Pipeline and American Quasar should reduce and delay the impact of the project as a whole.

Birth, marriage, and divorce data also reflect the long-run trend of steady growth. However, the year-to-year changes have been quite large, both in positive and negative directions. The data for deaths do not appear to indicate any clearcut upward or downward long-run trend, but short-term volatility is again evident. The same can be said for the number of food stamp and Aid to Families with Dependent Children (AFDC) recipients.

THE ECONOMY

Except for the much greater contribution of agriculture to the county's economy, as compared to the overall Wyoming's economy (14.14 percent of total 1980 personal income versus 2.46 percent), the county's economic activity is distributed among the various sectors much the same as the entire state. Mining is the most important sector, accounting directly for more than 20 percent of the county's total personal income, nearly doubling its 1970 share. Construction and government account for almost equal shares of nearly 16 percent of 1980 total personal income, and rank just behind mining in their relative contributions to the county economy. Agriculture's share of total personal income fell more than 10 percentage points between 1970 and 1980, and went from most important to fourth place. Major agricultural commodities include beef (with an average rank of 8th among Wyoming counties) and hay (average rank of third). However, the trend over the last 10 years is downward. In the early 1970's Sublette County was the number one Wyoming producer of "all hay," but by 1980 it had fallen to fourth place.

Table 4: Personal Income by Major Source (Thousands of Dollars)*

Source	Wyoming 1980		Sublette County 1980		Sublette County 1970	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	99980	2.46	4812	14.14	2906	24.70
Ag Serv., For., Fish, and Other	13143	.32	187	.55	82	.70
Mining	1015626	24.99	6884	20.22	1303	11.07
Construction	464577	11.43	5380	15.80	1350	11.47
Manufacturing	196636	4.84	299	.88	243	2.07
Transportation & Public Utilities	415770	10.23	3565	10.47	1620	13.77
Wholesale Trade	193476	4.76	501	1.47	0	0
Retail Trade	382244	9.41	3550	10.43	1281	10.89
Finance, Insurance & Real Estate	137457	3.38	781	2.29	242	2.06
Service	458014	11.27	2798	8.22	730	6.20
Government	687257	16.91	5283	15.52	2010	17.08
Total	4064180		34040		11767	

* REIS Data

Tourism is also a major income producer. In addition to the exceptional outdoor scenery and diverse recreational opportunities available within the county, two of the main access routes to the Grand Teton-Yellowstone area run through the county. While not reflected directly by any sector listed in Table 3, the importance of tourism is reflected by the pronounced seasonality of employment and lodgings' sales tax collections data.

The strength of the county's economy is suggested by per capita income (PCI) data. In 1970, Sublette County had a PCI of \$3,860, sixth highest in Wyoming and 4.7 percent above the state's PCI. By 1980, PCI was up to \$11,234, seventh best in Wyoming and 4.1 percent higher than the statewide average. The county's 1980 PCI was 118 percent of the nation's. A year later, Sublette County had slipped to ninth place among Wyoming counties, and its PCI (\$11,616) was actually 1.0 percent lower than statewide. However, even with the relative slippage between 1980 and 1981, the county's 1981 PCI was still 111 percent of the nation's.

The sudden severity of the recession in Sublette County is clearly indicated by the jump in the unemployment rate between 4/82 and 1/83. The number of unemployed more than doubled between those quarters, and the unemployment rate vaulted from 4.4 percent in 4/82 to 10.2 percent in 1/83. April data indicate a continuation of that trend. The April 1983 jobless rate stood at 12.0 percent. Normal seasonal factors should moderate that trend, perhaps even temporarily thinning the ranks of the county's unemployed workers. However, a more long-lasting turnaround in the economy may not occur until 1984, when the mining sector in Sublette County, as well as statewide, may begin to respond to the rebounding national economy.

OUTLOOK

Outdoor recreation and the Riley Ridge Project suggest a robust economic future for Sublette County. However, there will be short-term problems along the way, such as the current recession now, and a shortage of public and private goods and services when construction and drilling begins at Riley Ridge. Without careful planning, short-term, boom-related problems could have serious long-run consequences.

Sublette County's already well-known and heavily used wilderness areas will continue to attract visitors, and with the ever-growing popularity of backpacking, visitor numbers should steadily increase. The county's location along major routes to Yellowstone and Grand Teton National Parks will help visitors discover the county's recreational opportunities. The frequently crowded conditions in the national parks will encourage visitors to spend more time in adjacent, less crowded areas such as Sublette County.

John Merrifield and Ruth Tebbutt, IPR

Sources:

Department of Administration and Fiscal Control, Division of Research and Statistics, Wyoming Data Handbook: 1981, State of Wyoming.

Sublette County Planning and Zoning Commission. Sublette County Comprehensive Plan, Sublette County Board of Commissioners (June 20, 1978).

Wyoming Industrial Development Corporation. Economic Blueprint Component of Public Investment Plan: Big Piney, Wyoming

_____. Economic Blueprint Component of Public Investment Plan: Pinedale, Wyoming, State of Wyoming, Department of Economic Planning and Development (1975).

1982 Community Profile: Pinedale, Wyoming. Department of Economic Planning and Development, Industrial Development Division.

#

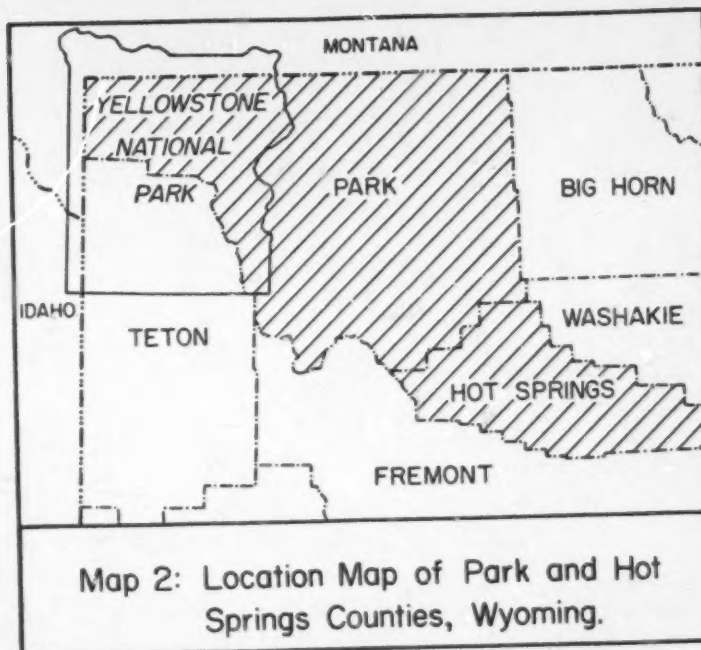
Hot Springs County Profile

PHYSICAL CHARACTERISTICS

Hot Springs County occupies 2,022 square miles of land located just northwest of Wyoming's center point. With the most irregular boundaries of any county in the state, it is bordered on the north by Park and Washakie Counties; on the east by Washakie, on the south and southwest by Fremont Counties; and on the west by Park County.

The county is also one of four Wyoming counties situated in the Big Horn Basin, occupying the southwest corner of this region. The basin area itself is almost entirely surrounded by high, rugged mountains: the Big Horn Mountain Range, forming the basin's eastern boundary, and the Absaroka Range, extending from upper Yellowstone and forming its western edge, are joined by the Owl Creek Mountains, the basin's southern border. Another topographical feature of the basin area is the Wind River Canyon, located south of Thermopolis, the county seat of Hot Springs County. It is at this point, known as the Wedding of the Waters, where the Wind River becomes the Big Horn River before continuing northward for the majority of its length--thus making it one of only two rivers of the United States flowing north. Although the county is located more on the mountain slopes than in the basin floor, the high peaks, deep canyons, and basin areas create a diversified topography in Hot Springs County. Elevations range from 4,270 feet within the basin area at the town of Kirby, to 4,326 feet north of the Wind River Canyon in Thermopolis, to 12,495 feet at Washakie Needles located within the Owl Creek Mountains.

Hot Springs County is generally characterized by an arid climate; however, just as the geography varies, so does the climate. The southern and western edges of the county are high enough to receive 50" of precipitation annually. Some of these wet areas are in an alpine zone and experience a short growing season coupled with a cool to cold temperature. Some lower elevations are in a true (though cold) desert zone. Here, the Absaroka Range captures the moisture of air masses arriving from the Pacific Ocean. The air masses then warm and begin to absorb moisture from the surface as they descend into the basin area. Resulting climatic conditions are low precipitation (with less than 10" of precipitation annually), a growing season of 95 days, and extreme variations in temperature. In Thermopolis, where over half of the county's population is concentrated, the climate is comparatively moderate year-round. On average, the temperature is 19°F during January and 72°F during July, for an annual average of 44°F. The climate is also characterized by an average humidity of 55 percent and a low, average annual wind velocity of 5 m.p.h., due largely to protective mountain ranges surrounding the city. Mean annual precipitation is 16.79",



while mean annual snowfall is 41". Nearly all major farm crops are grown in this area, where the length of the growing season averages 154 days.

HISTORY

Hot Springs County derives its name from the Big Horn Hot Springs, located on what is now a state reservation just east of the center of the county. It is also about these medicinal springs that much of the county's early history centers. The Indians in the area had been aware of the existence of the springs and the Shoshones had stayed in the vicinity hunting the abundant game and fully availing themselves of the curative powers at the spring. Late in the 1880's, white men discovered a hot springs near the Big Horn River, approximately four miles from the mouth of the Wind River Canyon. Jim Bridger was probably the first white man to bathe in these now noted springs (the Bridger Trail crossed the Big Horn River at the mouth of Owl Creek, five or six miles below the springs). History continued to be made when in 1896 the U.S. Government purchased the Big Horn Hot Springs and surrounding territory from the Arapahoe and Shoshone Indians for \$60,000. The 10-mile tract of land was opened to homestead settlement, except for one square mile encompassing the springs, which was commissioned to the state. It was not until the completion of the Chicago, Burlington, and Quincy Railroad in 1910 that the springs began to be widely known.

Opening of land for homesteading paved the way for economic expansion. The livestock business became the first flourishing industry. Although the first settlers began ranching operations in the Owl Creek region by 1883,

Figure 7a: Hot Springs County On-Line Data Base

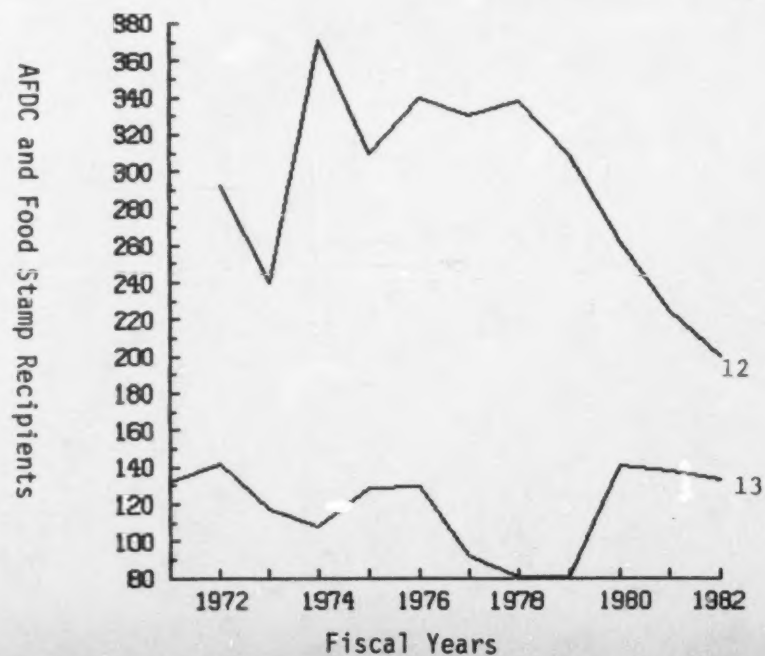
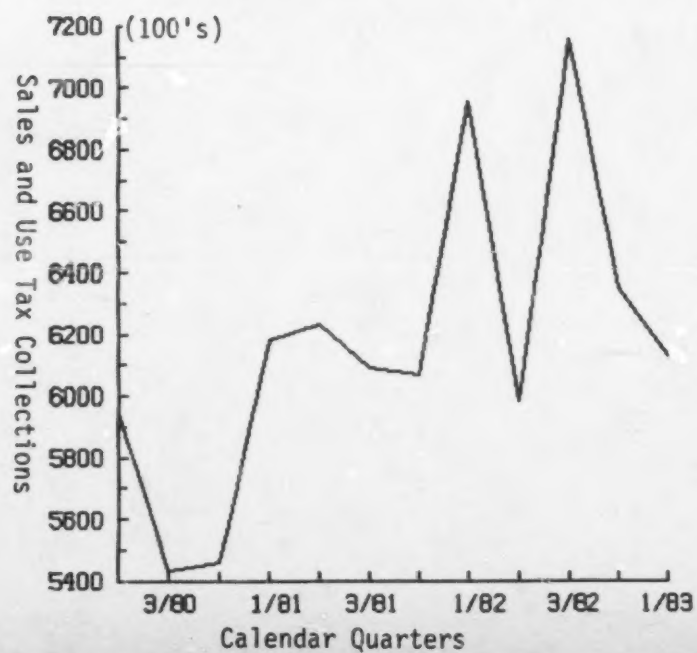
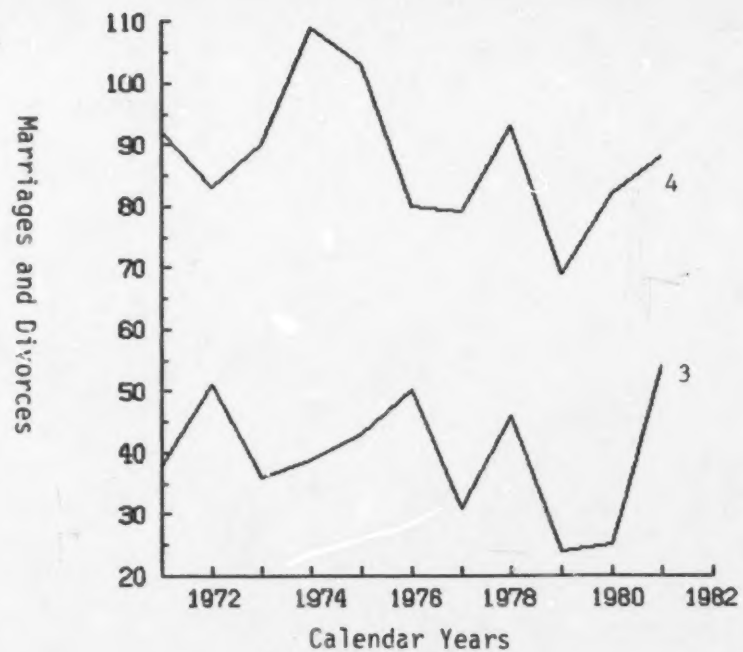
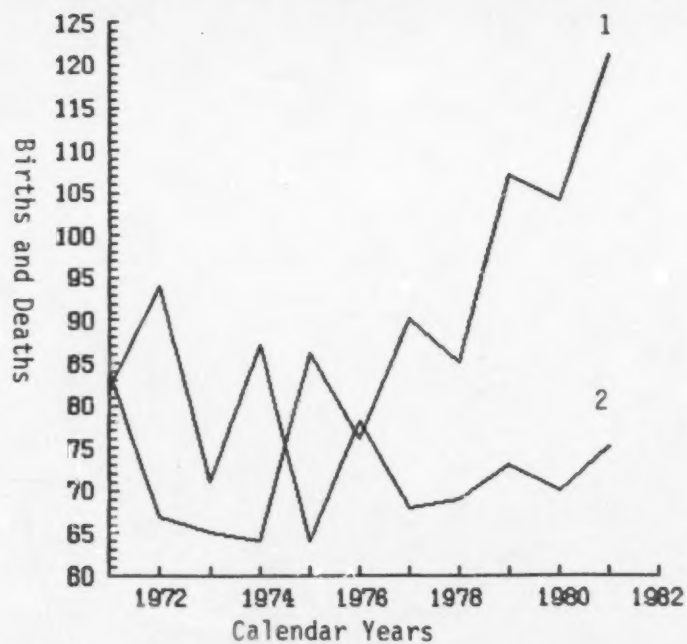


Figure 7b: Hot Springs County On-Line Data Base

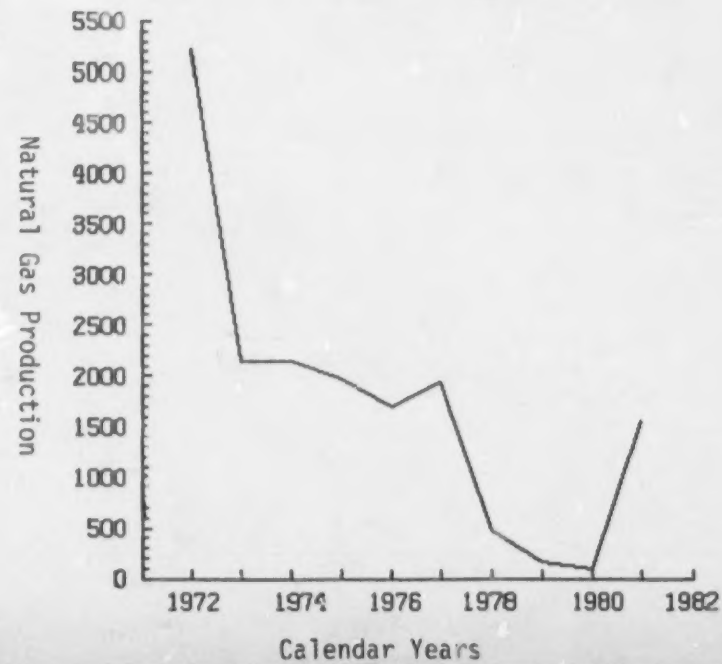
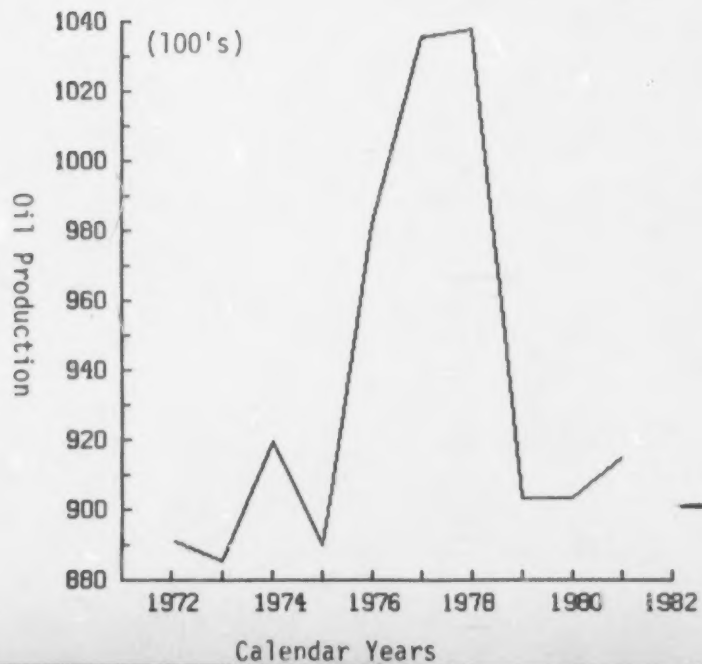
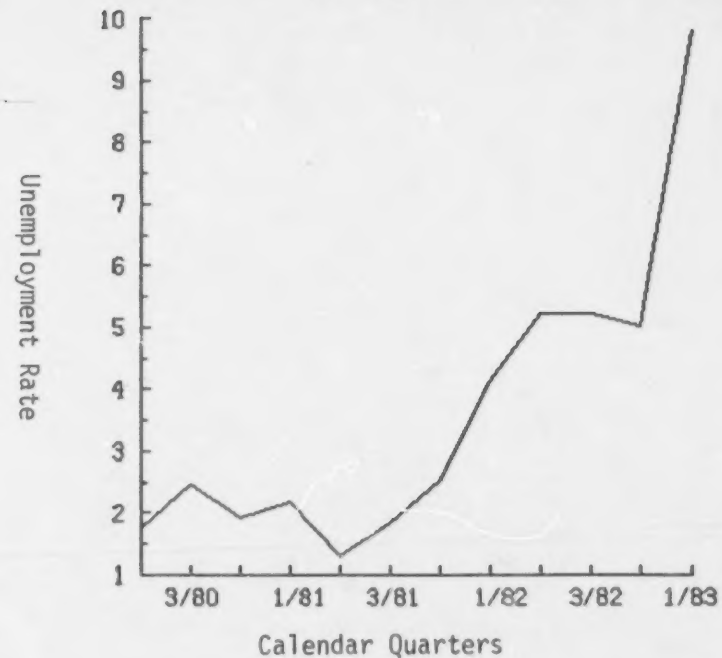
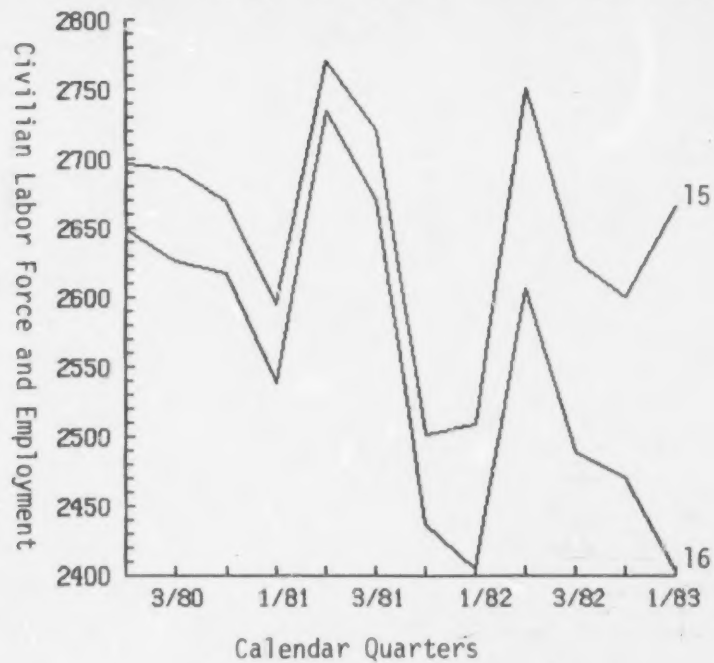


Table 5: Hot Springs County Profile

Calendar Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1. Births	84.	67.	65.	64.	86.	76.	90.	85.	107.	104.	121. ¹	INA
2. Deaths	82.	94.	71.	87.	64.	78.	68.	69.	73.	70.	75. ¹	INA
3. Divorces	38.	51.	36.	39.	43.	50.	31.	46.	24.	25.	54. ¹	INA
4. Marriages ²	92.	83.	90.	109.	103.	80.	79.	93.	69.	82.	88. ¹	INA
5. Population	5300.	5000.	5000.	4800.	4900.	5100.	4900.	4900.	5400.	5710.	5785.	5814
6. Oil Production (HBBL)	INA	99105.	88544.	91950.	88967.	98201.	103548.	103782.	90313.	90342.	91500.	INA
7. Valuation of Oil Production (H\$)	INA	253061.	304365.	537490.	577256.	695671.	763675.	836275.	887446.	2072460.	2785893.	INA
8. Natural Gas Production (HCMF)	INA	5224.	2137.	2139.	1967.	1694.	1939.	470.	161.	93.	1551.	INA
9. Valuation of Natural Gas Production (H\$)	INA	1012.	170.	163.	101.	95.	98.	156.	53.	74.	3362.	INA
10. Coal Production (HST)	INA	85.	79.	67.	40.	17.	16.	49.	92.	183.	356.	INA
11. Valuation of Coal Production (H\$)	INA	226.	279.	288.	287.	141.	154.	468.	1280.	2735.	6180.	INA
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
12. AFDC Recipients	INA	293.	240.	371.	310.	340.	330.	338.	309.	262.	224.	200.
13. Food Stamp Recipients	132.	142.	117.	108.	128.	129.	92.	81.	81.	141.	138.	133.
14. AFDC Payments (\$)	INA	37761.	32403.	56286.	42249.	60818.	65578.	70704.	67442.	70766.	62241.	56049.
Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
15. Hotel, Motel, & Camp Sales & Use Tax Collections(\$)	16678.	22664.	14327.	16344.	19047.	28010.	14293.	13851.	22517.	29583.	15892.	12805.
16. Total Sales and Use Tax Collections (\$)	594477.	543050.	546145.	618062.	623287.	609204.	606929.	695164.	598236.	715422.	635209.	613083.
17. Liquor Sales (\$)	90876.	86238.	112195.	70537.	88340.	89750.	113854.	76596.	100183.	85204.	102321.	74651. ³
18. Gasoline Gallonage (GL)	931420.	1078105.	902022.	847520.	1032490.	1051149.	969484.	828120.	1109077.	930746.	786869.	720000.
19. Civilian Labor Force	2697.	2692.	2669.	2596.	2770.	2721.	2501.	2508.	2750.	2626.	2601.	2665.
20. Employment	2649.	2626.	2618.	2539.	2734.	2671.	2438.	2405.	2607.	2489.	2470.	2403.
21. Unemployment	48.	66.	51.	57.	37.	50.	63.	103.	143.	137.	131.	262.
22. Unemployment Rate	1.8	2.5	1.9	2.2	1.3	1.8	2.5	4.1	5.2	5.2	5.0	9.8

¹Provisional data from the Wyoming Department of Public Health, Division of Vital Statistics.

²1971 through 1979 are estimates made by the U.S. Bureau of the Census, not an actual count as in 1980. 1981 and 1982 are estimates made by the Department of Administration and Fiscal Control.

³Estimate based on trend and January data.

Sources: Series 1-4: Wyoming Department of Public Health, Division of Vital Statistics. "Vital Statistics." Published yearly.

Series 5: Regional Economics Information System, Bureau of Economic Analysis. Population data included in table of "Personal Income by Major Sources."

Series 6-11: Annual Report: Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal year report.

Series 12-14: Wyoming Division of Public Assistance and Social Services. Management Information and Statistical Report. Published biannually.

Series 15: Sales and Use Tax Summary by County. Hotel, Motel, and Camp Sales Tax Collections. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.

Series 16: Net Collections by Business Class by County. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.

Series 17: Sales by County-City. Wyoming State Liquor Commission. Published monthly.

Series 18: The Gasoline Gallonage Report. Petroleum Association of Wyoming. Gasoline consumption by county. Published monthly.

Series 19-20: Employment Security Commission of Wyoming. Labor Force Trends. Published quarterly.

there were probably not more than a half dozen big stockmen in the county. The availability of homesteads lured settlers to the area, who turned smaller herds of cattle on the range. During the year 1917, about 450 carloads of cattle were shipped on the Chicago, Burlington, and Quincy Railroad to Omaha and Chicago markets. Sheep ranching also made its appearance. Further development occurred with the relocation of Thermopolis from the mouth of Owl Creek to within close vicinity of the Big Horn Hot Springs. The town became a gathering place for cowboys and sheepherders.

The discovery of light oil at Grass Creek in 1914 resulted in a new type of wealth. Rapid development occurred in 1917 when oil was struck in Warm Springs, bringing oil fields to within 10 miles of Thermopolis. A pipeline was constructed to deliver 500,000 barrels of oil from the Warm Springs Dome to the Midwest Refining Company. Numerous other wells were sunk during 1918 in oil domes throughout the county, which was then recognized as one of the great oil producing sections of the state.

Rich coal fields in Hot Springs County were also discovered and developed. Mines were opened at Gebo, near the northern boundary, at Crosby, just southeast of Gebo, at the Ray Mines, northeast of Thermopolis, and at the Hoyt Mines, northwest of Thermopolis. The Gebo Mines shipped 300,000 tons during the year 1917.

NATURAL RESOURCES

Minerals

Oil is by far the most valuable commodity in Hot Springs County. In 1982, crude oil accounted for 92 percent of the county's total assessed valuation. The Department of Economic Planning and Development (DEPAD) noted in their 1982 Wyoming Minerals Yearbook that production has generally declined since the 1960's, but that unit valuation has increased at such a rate that valuation has risen dramatically. Again in 1982, oil valuation rose nearly \$8.00 per barrel. This 34 percent jump in valuation was accompanied by a slight 1.3 percent increase in oil production.

It is projected that oil production will show a slow decline through the mid 1980's, and that the large unit valuation increases will not continue.

In 1981, production and valuation of natural gas were 1,567.7 percent and 4,443.2 percent, respectively, higher than in 1980. Table 5 indicates that gas production in the county during 1981 was 155,076 million cubic feet (mcf) and provided \$336,150 in tax valuation.

The Oil and Gas Conservation Commission says that these substantial increases cannot be attributed to any significant new field discoveries. Instead, increased demand and high prices are viewed as the reasons. Jim Felton, of the Department of Revenue and Taxation, supports this contention and also notes that the same factors pushing up prices and pro-

duction in Hot Springs County prompted 1982 assessed valuation on 1981 Wyoming gas production to generate the largest taxable valuation that the state has ever seen. He further indicated that more recent figures demonstrate a future decline in gas production and in valuation from the 1981-82 figures.

A vast bed of coal underlies much of the Big Horn Basin and is exposed in a broad area in the northern region of Hot Springs County. The Northwestern Resources' Grass Creek Mine operates in this area and supplied the market with 35,617 tons of coal in 1981. Applications to increase capacity of the mine to 700,000 tons per year have been filed, but according to DEPAD, transportation problems and lack of demand lessen the chances for expansion. As it is, coal production in Hot Springs is forecasted to remain around 10,000 to 20,000 tons per year.

In recent years (since 1977), bentonite has also contributed to the county's mining sector. DEPAD reports the following production in tons from 1977 to 1981: 1,324; 6,694; 81,348; 21,524; and 122,702. It is interesting to note, that despite the nearly 100 fold jump in production of bentonite during these reported years, projections for bentonite production in Hot Springs County after 1981 is zero.

Hot Springs County has several minerals which are not presently mined. These include gypsum, phosphate rock, copper, tungsten, and limestone.

Land

Hot Springs County has a land area of 1,294,080 acres, ranking it as the smallest county in the state. The largest landowner in the county is the Federal Government, which owns 191,174 acres, or 41.44 percent. The various federal agencies, such as the Bureau of Land Management and U.S. Forest Service, control much of the forested land and a large part of the foothills and basin floor areas. Private land, which constitutes 30.88 percent of the county's land area, is concentrated along riverbeds. Private ownership is also found in the southeastern and western ends of Hot Springs County. The state and local governments own a total of 197,174 acres (15.24 percent), while the Wind River Indian Reservation occupies the remaining 161,000 acres (12.44 percent).

Water

Because the area is arid, the supply of water from melting snow in nearby mountains is extremely important. Water coming from these mountains and other watersheds feed the Big Horn River, the county's principal river. The larger watersheds include Owl Creek and Cottonwood Creek, which flow eastward, dropping in elevation into the Big Horn Basin from the Absaroka Mountains. The river is further dependent upon water releases from the Boysen Reservoir, located several miles south of the county line in Fremont County.

The State Engineer's Office reports that groundwater resources at shallow depths in the

Big Horn Basin are abundant enough to supply future domestic, stock, and municipal uses. Potential areas for groundwater development exist near the Big Horn Mountains, the Wind River Mountains, the Owl Creek Mountains, the Bridger Mountains, and other uplifts. In Hot Springs County, the communities of Grass Creek, Hamilton Dome, Gebo, and Kirby are presently supplied by wells.

THE PEOPLE

The most recent population figures available from the U.S. Census Bureau show a 1980 population of 5,710 for Hot Springs County. This 15.31 percent growth over 1970 reverses the declining population trend between 1960 and 1970, when the county lost over 22 percent of its population. The loss of population during the 1960's was part of a nationwide trend in which most of the rural United States lost population. Reasons for growth over the past 10 years are more difficult to explain since no single, major development has occurred.

Looking at Figure 8, one sees that the population increase from 1970 to 1980 did not have a significant effect on the proportion of males to females. The 1970 census showed that the county was divided, 49.6 percent male and 50.4 percent female; the 1980 census showed the same apportionment, with 49.9 of the population being male and 50.1 female. Age distribution was affected by the population increase, however, as is evidenced by a decrease in the median age from 36.5 to 32.0, but still much higher than the statewide average of 27.1.

An estimated 46 persons were added to Hot Springs County's population during 1981 as a result of natural increase, the excess of births over deaths. The number of births grew 44.05 percent, a higher percentage than the population growth, from 1971 to 1981. The number of deaths began to level off in 1977 and then sustained a lower level. Higher figures in previous years can perhaps be related to the higher percentage of residents in the older age brackets.

Food stamp and AFDC recipients decreased 6.34 percent and 31.74 percent, respectively, from 1972 to 1982. The decreases occurred despite the 16.28 percent estimated 1972-1982 population growth rate. Inflation and policy changes, such as eligibility requirements, thus become the principle sources of the 48.43 percent increase in AFDC payments from 1972 to 1982.

ECONOMY

The economy of Hot Springs County is strongly resource based. Mining constitutes the highest percentage of personal income in the county (refer to Table 6). While mining has not always been the primary source of income in Hot Springs County (government generated a higher percentage in 1970), the industry increased 3.64 percentage points from 1970 to 1980 to dominate the economic climate.

Government is another important economic sector in Hot Springs County. In 1980, the government accounted for 20.43 percent of total income generated. Mining was the only industry which generated a larger percentage. Construction increased 7.13 percentage points from 1970 to 1980 to capture the third largest percentage of income generated. In 1980, construction constituted 15.90 percent of the total. This is due in part to the need for additional housing and municipal infrastructure as a result of the growth in population--specifically, the younger population--which Hot Springs County has experienced over recent years.

Of great importance to the Hot Springs County economy is the tourism industry. Two indicators (sales and use tax on hotels, motels, and camps; and gasoline gallonage) both display strong seasonal trends. The third calendar quarter of each year is consistently the strongest for these indicators.

As the home of the second most famous hot springs system in Wyoming (after Yellowstone), Hot Springs County is a mecca for tourists and a haven for health seekers who come to bathe in the medicinal waters of the spring. The "world's largest mineral hot springs" are located in Hot Springs State Park, which offers several springs, commercial swimming pools, the State Bathhouse, as well as several scenic attractions such as the Devil's Punch Bowl, Teepee Fountain, and Monument Hill. A moderate climate, the beauty of varied landscapes, the recreational opportunities offered by the Wind River Canyon, and the mountains of the county are also among the many allurements found in Hot Springs County.

OUTLOOK

From the beginning of the 1970's, Hot Springs County has maintained a relatively constant growth rate; never "booming," as has been true of other mineral-based counties, but steadily developing its coal, oil, mineral waters, and other resources. There are several factors which will make this a continuing trend.

One important growth constraint is the limited availability of land. Over half (67.46 percent) of the county's population is centered in the town of Thermopolis. Because Thermopolis is bordered by the Big Horn River, the only growth that can occur is to the west and south. Furthermore, some of the land that is available for expansion is used for agriculture. Use of the agricultural land for expansion might have threatening implications for the maintenance of diversification in the county's economy.

Another strength is related to the county's economy. While fortunes in the mining industry may fluctuate, there is one resource in Hot Springs County that will go on and on: the mineral springs at the state park. The permanent importance of the services and retail trade sector in the county's economy (see Table 5) indicates a stability which is in large part due to tourism.

Figure 8: Hot Springs County; Age by Sex in 5-year Age Groups; 1970, 1980.

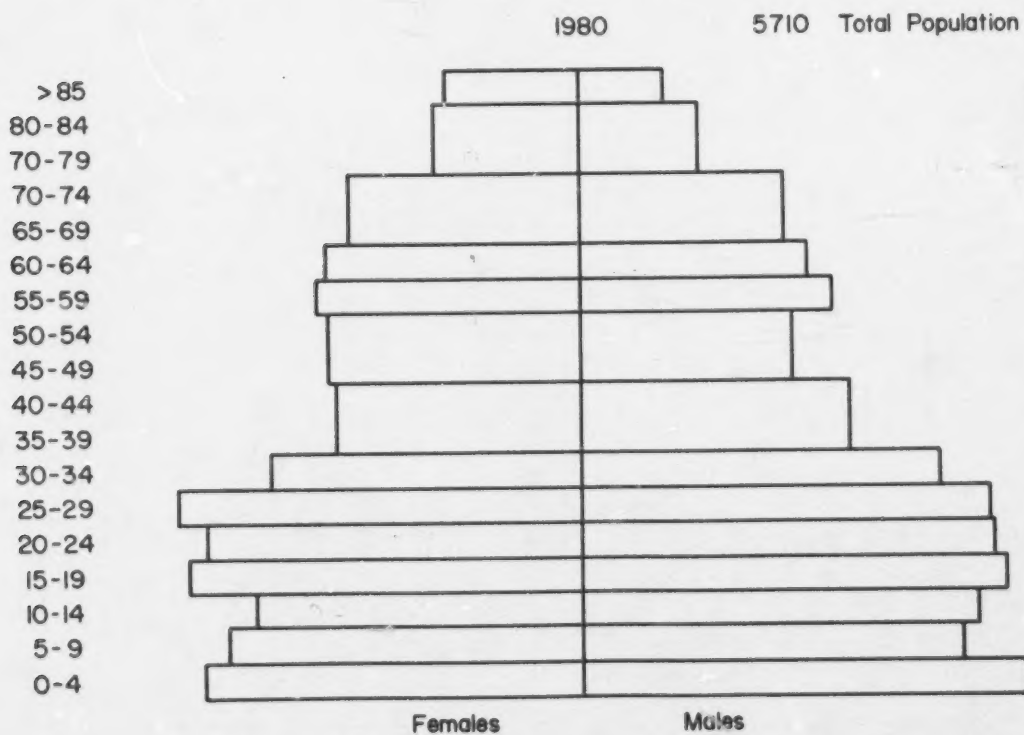
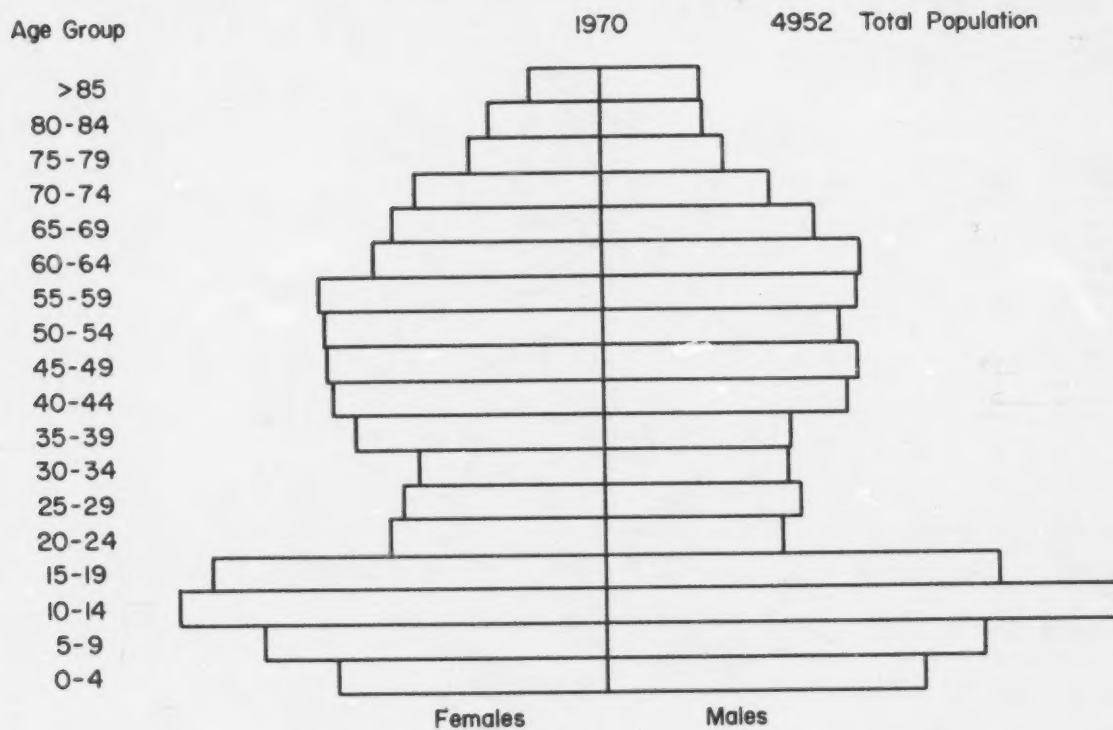


Table 6: Personal Income by Major Source (Thousands of Dollars)*

Source	Wyoming 1980		Hot Springs County 1980		Hot Springs County 1970	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	99980	2.46	1581	4.50	286	2.54
Ag Serv., For., Fish, and Other	13143	.32	(D)	--	(<)	--
Mining	1015626	24.99	7766	22.11	2078	18.47
Construction	464577	11.43	5585	15.90	987	8.77
Manufacturing	196636	4.84	351	1.00	203	1.80
Transportation & Public Utilities	415770	10.23	2443	6.95	1094	9.73
Wholesale Trade	193476	4.76	(D)	--	386	3.43
Retail Trade	382244	9.41	3694	10.51	1172	10.42
Finance, Insurance & Real Estate	137457	3.38	1290	3.67	484	4.30
Service	458014	11.27	4380	12.47	2074	18.44
Government	687257	16.91	7176	20.43	2448	21.76
Total	4064180		35131		11249	

* REIS Data

(D) Not shown to avoid disclosure of confidential information; data are included in totals.

(<) Less than \$50,000; data are included in totals.

Population projections published by the Department of Administration and Fiscal Control also provide support for the continuance of steady development in Hot Springs County. By 1985, the county's population is expected to grow a mere 4.17 percent to 5,948 people. Population figures for 1990 show a 9.95 increase from 1980, less than the growth seen from 1970 to 1980.

Ruth Tebbutt, IPR

Sources:

Bartlett, Ichabod S. History of Wyoming, the S.J. Clark Publishing Company (1918).

Breckenridge, Roy M. and Hinckley, Bern S. Thermal Springs of Wyoming, Wyoming Geological Survey (March, 1978).

Bureau of Land Management, Worland District, Wyoming. Grass Creek: Oil and Gas Leasing Environmental Assessment Record (1978).

Department of Administration and Fiscal Control, Division of Research and Statistics. Wyoming Data Handbook (1980).

Hot Springs County Planning Commission, et. al. Hot Springs County Land Use Plan: Thermopolis, East Thermopolis, Kirby (1978).

"Hot Springs County Shows Great Progress Since 1890," Thermopolis Independent Record (August 31, 1950).

Regional Planning Office. Hot Springs County Current Land Use Survey.

State Engineer's Office, Wyoming Water Planning Program. The Wyoming Framework Water Plan (May 1973).

"Tribes Cede Big Horn Hot Springs to the United States," Thermopolis Independent Record (Annual Edition).

Weynand, Bernard, et. al. Big Horn River Habitat Management Plan, U.S. Department of the Interior, Bureau of Land Management (February, 1979).

1980 Community Profile: Thermopolis, Wyoming, Department of Economic Planning and Development, Industrial Development Division.

#

Park County Profile

PHYSICAL CHARACTERISTICS AND CLIMATE

Named for its proximity to Yellowstone National Park in the northwestern corner of Wyoming, Park County is bounded on the north by the State of Montana, on the east by Big Horn and Washakie Counties, on the south by Fremont and Hot Springs Counties, and on the southwest by Teton County within Yellowstone National Park (see Map 2). The county is oblong in shape and ranks fifth in the state in area, containing 5,233 square miles. Two changes have been made in the boundaries since the county's creation in 1911. The first revision occurred in 1911, when a slight reduction was made in the area of Park County subsequent to the creation of Hot Springs County. Further alterations were made in 1929, when a portion of Park County was annexed to Yellowstone National Park and a part of Yellowstone National Park was appropriated to Park County.

The topography of the county varies--a common characteristic of the other Wyoming counties (Big Horn, Washakie, and Hot Springs) that are situated in the Big Horn Basin. Generally, Park County is mountainous, except for the part of the Big Horn Basin floor which forms its eastern portion. Elevations in the eastern lowlands vary from 3,000 feet to 5,000 feet. It is in this region of fertile and highly irrigable land that the agricultural area is located. The county's major communities are also found in this stretch of "table lands": Powell (elevation-4,365 feet); and Cody, the county seat (elevation - 5,016 feet).

Park County's western physiography presents an extreme contrast to its cultivated basin-floor valleys already described. Within the Absaroka Mountain Range on the west are some of the highest peaks in western Wyoming. Elevations of 12,000 feet to 13,000 feet are common. Prominent peaks include Frank's Peak, having an elevation of 13,140 feet; Mt. Crosby, 12,435 feet; Trout Peak, 12,269 feet; Dead Indian Peak, 12,253 feet; Younts Peak, 12,165 feet; Red Tops, 12,202 feet; and, Fortress Mountain, 12,075 feet. These mountains are the source for almost all of Park County's major streams.

The extreme contrasts between Park County's eastern and western topography can probably best be experienced by travelling along U.S. Highway 14-20, which follows the Shoshone Canyon through the center of the county. Praised by Teddy Roosevelt as "the most scenic 50 miles in the world," the road winds from the basin land east of Cody into the rugged and forested Absaroka and Beartooth Mountains.

Climatic conditions vary with the topography. The climate in the Cody-Powell area is affected by the presence of the Absaroka Mountains, which capture the moisture from Pacific

Ocean air masses and block the high winds. The Big Horn Mountains shield the area on the west, often preventing cold air masses arriving from Canada from reaching the basin. The climate of Cody and Powell therefore, is characterized by low humidity, low wind velocity, average temperatures of 17°F to 24°F in January and 70°F in July. Precipitation throughout the Cody-Powell area is concentrated in the months of May and June, and averages 6" to 10" annually. These climatic conditions all define a true desert climate.

As altitude increases toward the mountains, precipitation increases and average temperatures become lower. Some high mountain areas in western Park County experience as much as 20" or more precipitation. Most of this precipitation is the result of snowfall, which can be as much as 100" or more on individual mountain summits. Temperature in the mountains range from approximately -30°F to 90°F. (These temperatures represent extremes. The extreme range for the Cody-Powell area is from -47°F to 102°F).

HISTORY

Although Park County is young in the chronicles of recorded history, there is abundant evidence of early man's presence. The 11,500 to 12,000-year-old dates of the clovis mammoth hunters seem to be the oldest positive evidence of man in the region. A 1963 discovery made in a cave near the entrance to Yellowstone Park yielded a 1,300-year-old mummified hunter, plus artifacts which indicate the hunters ancestors may have also sought shelter in the "Mummy Cave" site.

The first white men to pass through the area may have been a small expedition under the command of a French Canadian fur dealer, De la Venerendrye, who travelled through the basin territory seeking a route to the Pacific in 1742-43. John Colter, a member of the Lewis and Clark Expedition, travelled through the region in 1807. His fanciful stories of Yellowstone and the geysers near the Shoshone River lent the name "Colter's Hell" to the region.

First settlers were still many years away as explorers, trappers, and miners moved through the area in the middle 19th century. It was still practically wilderness territory until the late 1870's, during which time the first reported herd of cattle was moved from Oregon into Park County by Charles Carter. The cattle industry expanded and flourished up to the blizzard of 1886-87, which swept through Montana and Wyoming killing large numbers of cattle. From this point, the livestock and agriculture industries changed. Soon, large flocks of sheep grazed the area and farmers settled on homesteads. Thus, began the story of irrigation and the reclamation of the West.

Colonel W.F. "Buffalo Bill" Cody visited the area and noted its promising future as a site for a prosperous community. Cody worked to convince the U.S. Congress to create the U.S. Reclamation Service and to build the Shoshone Dam, as it was then called. The dam was the first built by the newly-created Reclamation Service. The Shoshone Irrigation Project opened

Figure 9a: Park County On-Line Data Base

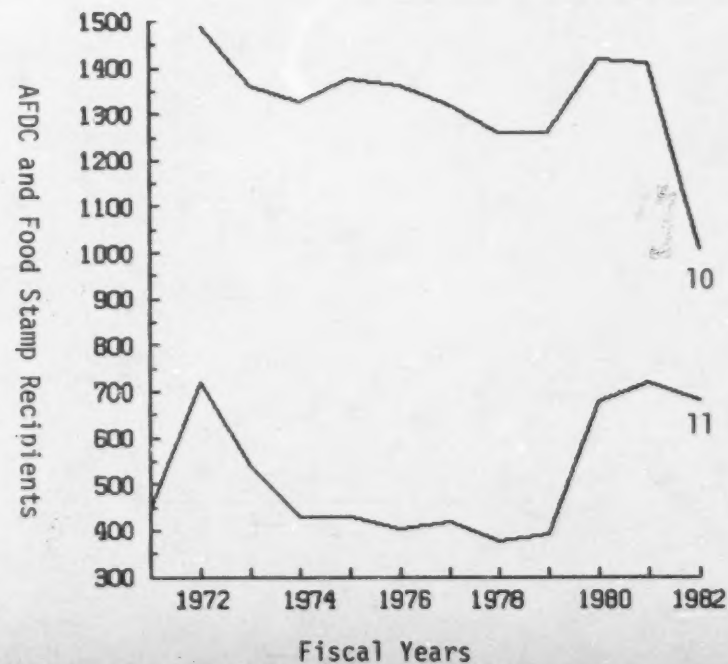
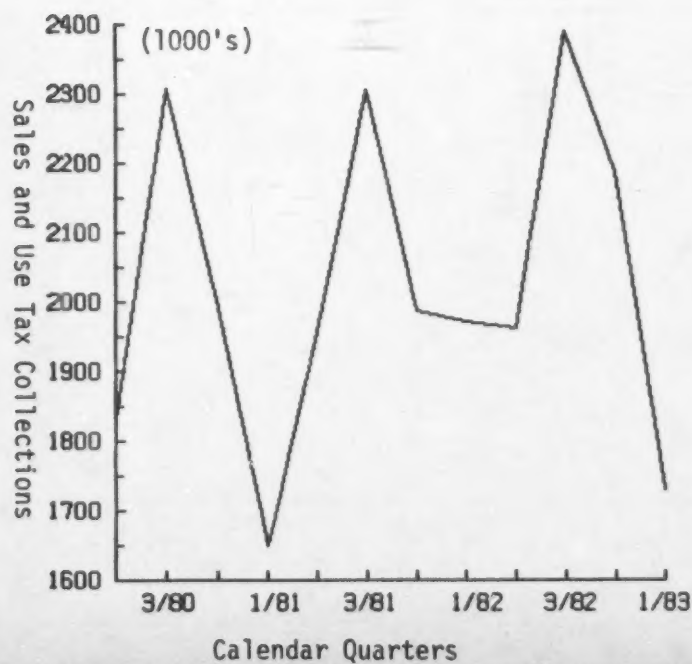
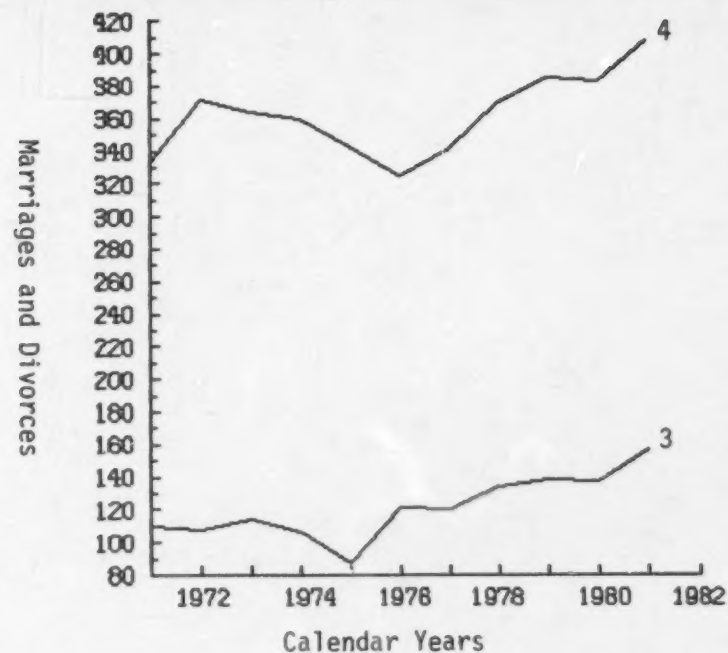
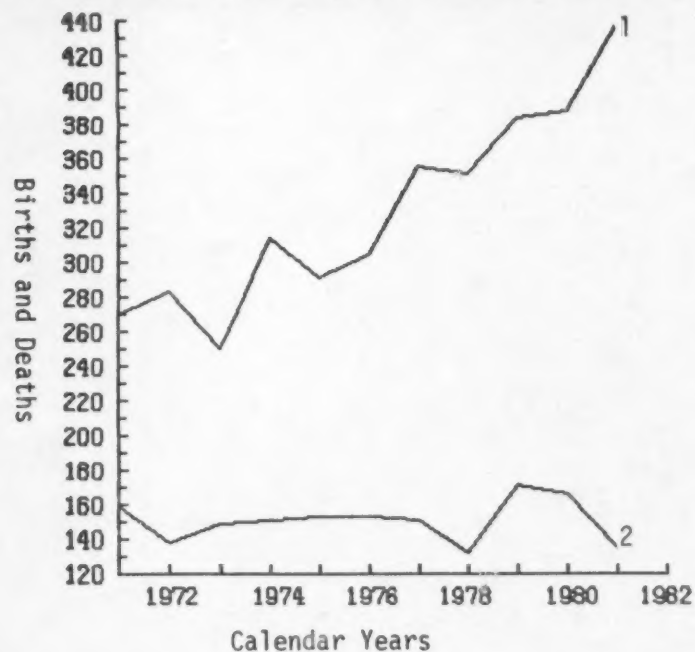


Figure 9b: Park County On-Line Data Base

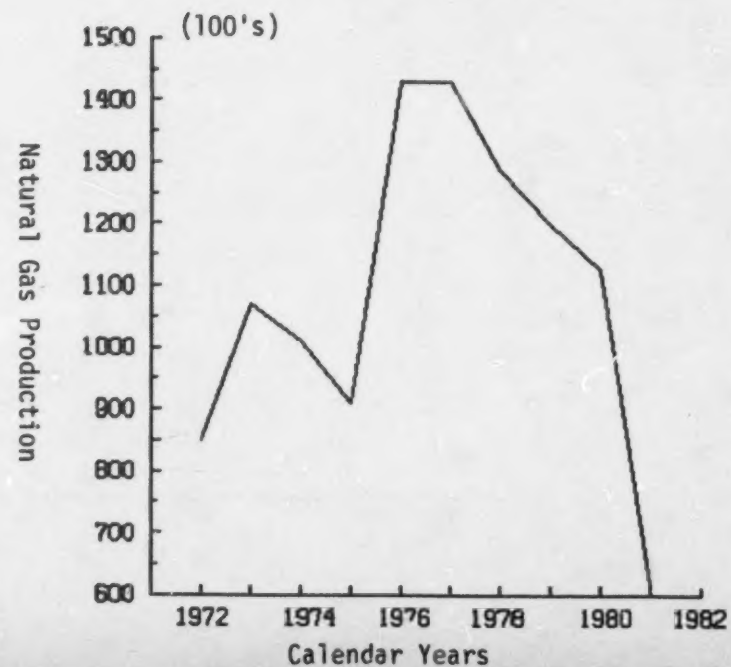
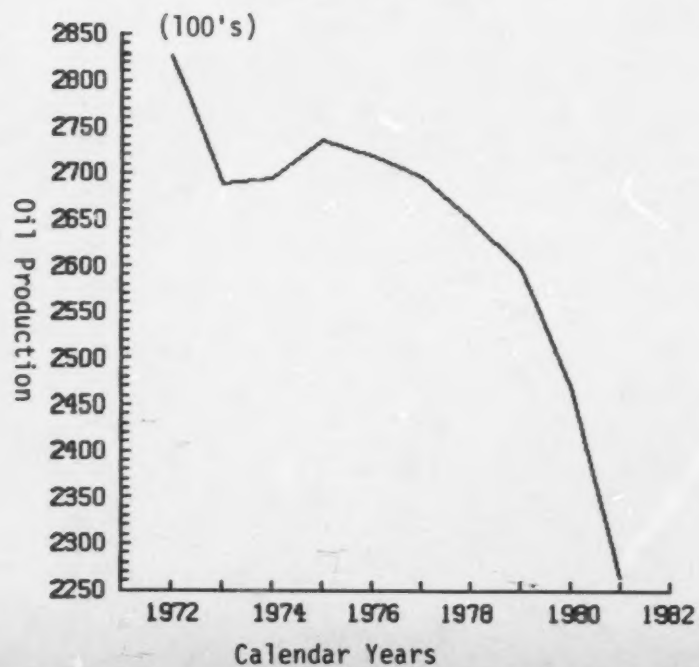
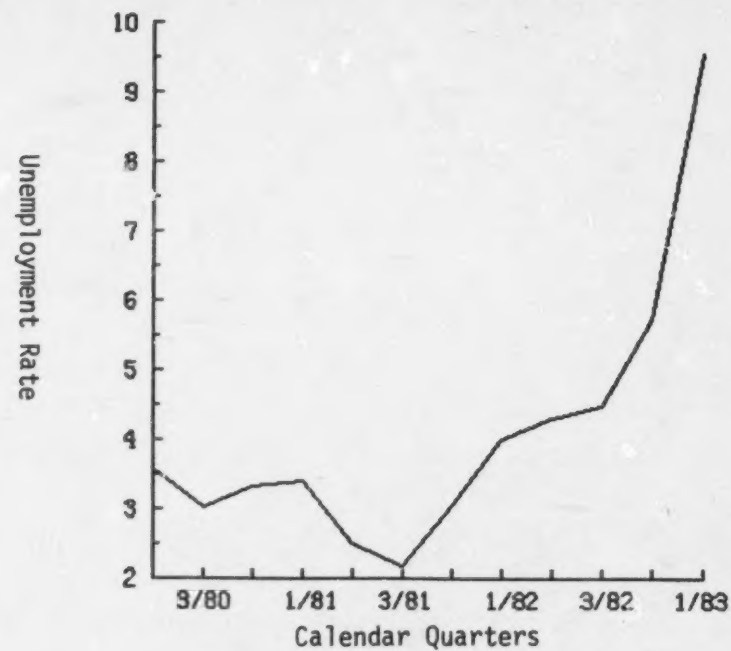
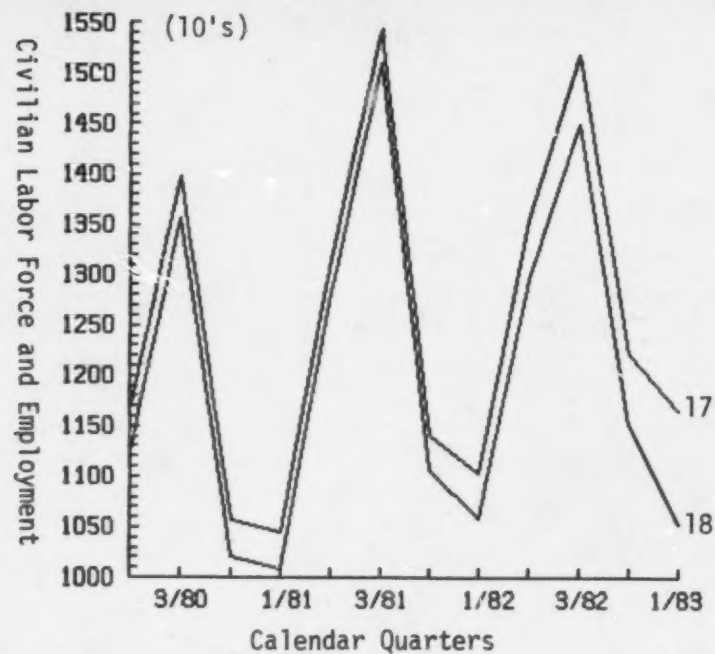


Table 7: Park County Profile

Calendar Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1. Births	270.	283.	250.	314.	291.	304.	355.	351.	383.	387.	437. ¹	INA
2. Deaths	159.	138.	149.	151.	153.	153.	151.	132.	171.	166.	135. ¹	INA
3. Divorces	110.	108.	114.	107.	87.	121.	120.	134.	139.	137.	157. ¹	INA
4. Marriages ²	333.	371.	364.	360.	343.	325.	342.	370.	385.	383.	409. ¹	INA
5. Population	18100.	18100.	18300.	18300.	18800.	19500.	19600.	20200.	21300.	21639.	21842.	22047.
6. Oil Production (HBBL)	INA	282794.	268900.	269352.	273578.	271829.	269520.	265091.	259757.	246981.	226421.	INA
7. Valuation of Oil Production (H\$)	INA	807062.	887928.	1409622.	1655171.	1674845.	1643483.	1773752.	2126072.	4374768.	6669338.	INA
8. Natural Gas Production (HMCF)	INA	84880.	106996.	101101.	90852.	142859.	142903.	128707.	119890.	112390.	61635.	INA
9. Valuation of Natural Gas Production (H\$)	INA	11914.	18884.	21981.	30687.	45665.	63694.	69214.	90894.	109784.	135758.	INA
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
10. AFDC Recipients	INA	1492.	1360.	1328.	1375.	1360.	1318.	1259.	1260.	1417.	1410.	1009.
11. Food Stamp Recipients	448.	718.	540.	431.	429.	402.	419.	378.	391.	678.	720.	683.
12. AFDC Payments (\$)	INA	211310.	202932.	206232.	202524.	221956.	243474.	234209.	267083.	344249.	350288.	270173.
Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
13. Hotel, Motel, & Camp Sales & Use Tax Collections (\$)	33662.	103635.	29198.	16017.	36714.	99223.	62105.	25411.	44770.	112096.	47175.	22197.
14. Total Sales and Use Tax Collections (\$)	1830136.	2306907.	1991770.	1648883.	1957454.	2305378.	1987102.	1972841.	1960813.	2390472.	2187655.	1728405.
15. Liquor Sales (\$)	392606.	397126.	448328.	248030.	392848.	438582.	465675.	312804.	420108.	423143.	458367.	296471. ³
16. Gasoline Gallonage (GL)	3985859.	5768397.	2944748.	2983714.	4363877.	6487016.	3438642.	2817698.	4069704.	5920478.	3441269.	3300000.
17. Civilian Labor Force	11660.	13979.	10564.	10446.	13146.	15422.	11416.	11033.	13541.	15177.	12211.	11649.
18. Employment	11243.	13557.	10213.	10089.	12818.	15087.	11069.	10592.	12956.	14499.	11512.	10536.
19. Unemployment	417.	422.	351.	356.	328.	335.	348.	441.	584.	679.	699.	1114.
20. Unemployment Rate	3.6	3.0	3.3	3.4	2.5	2.2	3.0	4.0	4.3	4.5	5.7	9.6

¹Provisional data from the Wyoming Department of Public Health, Division of Vital Statistics.

²1971 through 1979 are estimates made by the U.S. Bureau of the Census, not an actual count as in 1980. 1981 and 1982 are estimates made by the Department of Administration and Fiscal Control.

³Estimate based on trend and January data.

Sources: Series 1-4 : Wyoming Department of Public Health, Division of Vital Statistics. "Vital Statistics." Published yearly.
 Series 5 : Regional Economics Information System, Bureau of Economic Analysis. Population data included in table of "Personal Income by Major Sources."
 Series 6-9 : Annual Report: Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal year report.
 Series 10-12: Wyoming Division of Public Assistance and Social Services. Management Information and Statistical Report. Published biannually.
 Series 13 : Sales and Use Tax Summary by County. Hotel, Motel, and Camp Sales Tax Collections. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.
 Series 14 : Net Collections by Business Class by County. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.
 Series 15 : Sales by County-City. Wyoming State Liquor Commission. Published monthly.
 Series 16 : The Gasoline Gallonage Report. Petroleum Association of Wyoming. Gasoline consumption by county. Published monthly.
 Series 17-20: Employment Security Commission of Wyoming. Labor Force Trends. Published quarterly.

for homesteading in 1907, with 111,000 acres under irrigation. By this time, the towns of Cody and Powell were established. Powell, first known as Camp Colter, served as headquarters for workers on the Shoshone Irrigation Project. The town was renamed in honor of Major John Wesley Powell, early day explorer, conservationist, and director of the U.S. Geological Survey. Cody, which was formed by a land and irrigation development company for homesteaders, became formally organized after Colonel Cody convinced the Chicago, Burlington, and Quincy Railroad to construct a line to Cody in 1901. Today, these communities are the county's two primary activity centers.

NATURAL RESOURCES

Fossil Fuels

Oil and gas exploration and development has had a major impact on the economy of Park County. This industry began with the formation of the Shoshone Oil Company, followed by the Union Oil Company. Union Oil later sold its interests to the Continental Oil Company. When Continental Oil Company demonstrated that oil could be produced in commercial quantities, refineries were constructed and pipelines were laid to connect the fields to the refineries.

Oregon Basin, Garland, and Elk Basin--all located in Park County--rank among the oldest oil fields in Wyoming. In 1981, these fields, operated by Marathon Oil and Amoco, and 45 other fields (1,184 wells) produced 22,642,100 barrels of oil, as Park County ranked as the largest oil-producing county in the state. According to the Department of Economic Planning and Development (DEPAD), most of the county's production comes from the Oregon Basin and Elk Basin fields. The Oregon Basin has produced over 250 million barrels of oil since its discovery in 1912, while the Elk Basin has produced over 375 million barrels since 1915. DEPAD reports that production has been declining since the late 1960's, a trend that can be seen in Table 7. Projections show that these fields will become increasingly less productive and that Park County's oil production will fall to 16.6 million barrels by 1986.

With the exception of an increase in 1973, natural gas production in Park County has declined since the early 1960's. The 1973 increase was caused by the construction of a new pipeline, which allows lower quality gases to be mixed with the Oregon Basin and Elk Basin gas. Yet in 1981, gas production followed the general trend of the past 20 years, and decreased by over 5 million mcf from 1980. DEPAD expects that increased drilling should slow this trend during the next several years. Projections for 1982 indicate a 29.80 percent increase in natural gas production over 1981.

Minerals

Gypsum and bentonite are also currently contributing to the county's mining economy.

In 1961, Big Horn Gypsum Company began mining gypsum near Cody, to be used in the manufacture of plasterboard. Twenty years later, Park County is one of the three counties in Wyoming producing gypsum. Ranked second in production, the county reported 118,597 tons in 1981, representing a 1.60 percent increase over 1980 production. Short term projections show production gradually increasing over present levels.

Bentonite also is being mined in Park County, but in 1981 accounted for only .020 percent of the county's total mineral valuation. As the smallest producer in Wyoming, DEPAD reports that 1981 bentonite production was 41,263 tons. Bentonite is likely to maintain its low status in Park County's mining industry.

Several other minerals have been mined at one time or another in the county's history. During the 1950's, sulfur was extracted from local silver ores. Coal has been produced in small "wagon" mines throughout the county for local needs. Gold, silver, lead, zinc, molybdenum, and copper also have been mined in small quantities from time to time. The town of Kirwin sprang up on the Wood River during a "gold rush" at the turn of the century. A copper mine at the Kirwin site had been planned to be in operation by 1980. But the 1982 Wyoming Minerals Yearbook, reports that American Metals Climax (AMAX) has indefinitely postponed their plans for the mine.

Land

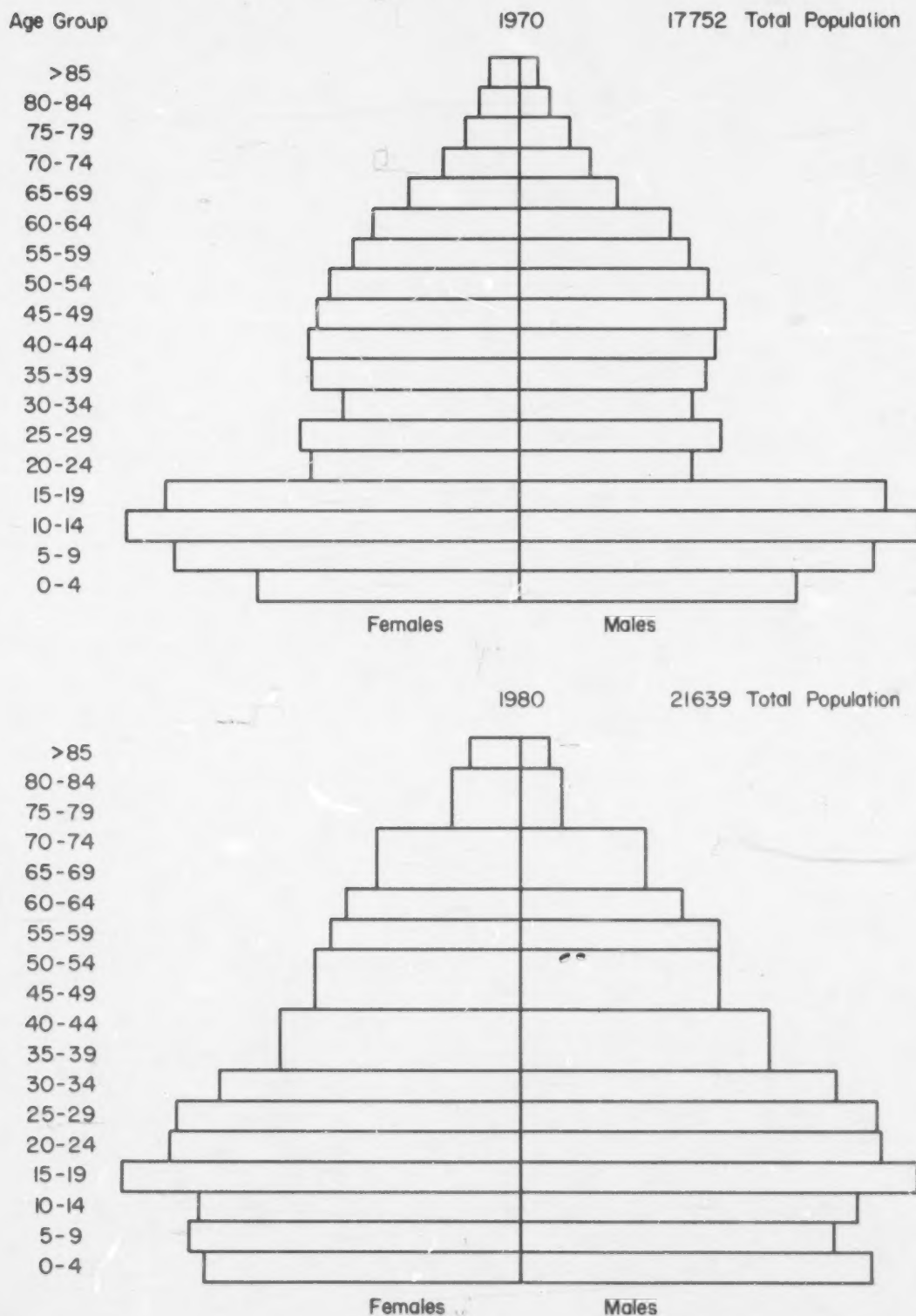
The Shoshone National Forest occupies over one-half of Park County--1,545,922 acres. As a result, federal ownership dominates. A total county land area of 3,349,120 acres, of which 10,240 acres are surface water, is divided by ownership as follows: federal ownership, 72.6 percent; state and local ownership, 5.17 percent, and private ownership, 2.2 percent.

Water

Most of the surface water in Park County originates in the mountainous areas. The county is drained by three major watersheds; the Greybull River, the Shoshone River, and the Clark's Fork of the Yellowstone River, which all flow in a northeasterly direction and are a part of the Missouri River Drainage System.

The Shoshone Irrigation Project contains the primary storage facilities. The key structure of the project is the Buffalo Bill Dam, located approximately 7 miles west of Cody with a total capacity of 491,350 acre-feet (Governor's Resource Management Tour of Wyoming's Big Horn and Park Counties, June 17-19, 1980). Water from the reservoir presently irrigates 93,000 acres in the Shoshone Irrigation Project. Non-irrigation benefits include flood control, fish and wildlife habitat, and power generation. Plans are in existence to enlarge the capacity of Buffalo Bill Reservoir in 1986 to provide more electrical power generation and irrigation.

Figure 10: Park County; Age by Sex in 5-year Age Groups; 1970, 1980.



The municipal water supply at Cody, the main center of population in Park County, is supplied via the Cody Canal. Located about 10 miles southwest of Cody, the present Cody Canal headgate is on the South Fork of the Shoshone River. Cody also utilizes a "raw" water system, which was initiated in 1962 to provide water to residents for lawn watering. The non-treated water is pumped from Beck Lake into a holding tank south of the city water works.

THE PEOPLE

There were 21,842 persons living in Park County in 1980. Although the county's population density of 4.17 persons per square mile suggests that its residents are thinly scattered, the situation is actually quite different. The majority of the population is clustered along its eastern border. Cody and Powell represent the areas with the highest population density. In 1980, census figures reported populations of 6,790 (31.09 percent of the county's total) and 5,310 (24.31 percent of the county's total) for Cody and Powell, respectively.

Park County has realized a 21.90 percent increase in population since 1970. Accompanying this increase was a rise in the county's median age, from 27.7 years in 1970 to 29.3 years in 1980. The change becomes significant when one learns that from 1960 to 1967, residents of Park County were collectively getting younger. The median age of the local population had dropped about 7 percent in a period of seven years. Park County's teenage market soared, having a profound effect on the area's economy. In 1980, the median age of Park County's population was 2.2 years older than the state's median age of 27.10 years.

ECONOMY

From 1970 to 1980, personal wage and salary income increased 231.06 percent. Mining is the one sector responsible for the increase, since all others either maintained their positions or declined slightly in their contribution to Park County's economy. The growing importance of mining is reflected by the sources of personal income in Table 8, which indicates that the mining industry accounted for 16.72 percent of the county's total income in 1980. Nevertheless, mining ranked second to the government sector. Remaining as the primary sector of the economy in Park County from 1970 to 1980, government accounted for 17.84 percent of total income generated. Retailing increased 1.02 percentage points between 70 and 80, becoming the third largest personal income contributor.

The strength of retail trade in the county is probably in part due to the importance of the travel industry. As is evidenced by the cyclical nature of hotel, motel, and camp sales and use tax collections, as well as total sales and use tax collections (see Table 7), the travel industry supports hotels/motels, restaurants, campgrounds, dude ranches, service stations, bars, and others. The city and county governments also benefit from these travel dollars.

Although farming accounts for only 6.31 percent of Park County's total personal income, the county continues to rank high as an agricultural county. Statistics compiled by the Wyoming Crop and Livestock Reporting Service show the status of the county in 1982: first among all Wyoming counties in the production of barley and oats; second in dry beans; third in sugar beets and "all cattle"; fifth in the production of corn grain; and, sixth in the category of "all hay."

Table 8: Personal Income by Major Source (Thousands of Dollars)*

Source	Wyoming 1980		Park County 1980		Park County 1970	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	99980	2.46	10264	6.31	4816	9.79
Ag Serv., For., Fish, and Other	13143	.32	726	.45	272	5.53
Mining	1015626	24.99	27225	16.72	4860	9.88
Construction	464577	11.43	13078	8.03	3001	6.10
Manufacturing	196636	4.84	20705	12.72	6095	12.40
Transportation & Public Utilities	415770	10.23	11285	6.93	3185	6.48
Wholesale Trade	193476	4.76	5082	3.12	1043	2.12
Retail Trade	382244	9.41	22904	14.07	6415	13.05
Finance, Insurance & Real Estate	137457	3.38	5019	3.08	1391	2.83
Service	458014	11.27	17449	10.72	7760	15.78
Government	687257	16.91	29047	17.84	10333	21.01
Total	4064180		162784		49171	

* REIS Data

OUTLOOK

Oil and gas production, agriculture, and tourism, provide for a well-rounded economy in Park County. Thus, the county cannot be considered as a potential locus for "boom-town" type development. Population projections made by the Department of Administration and Fiscal Control indicate a continuation of slow, constant growth. By 1990, it is expected that the county will experience a 16.82 percent population growth. However, these estimates are made with the assumption of zero industrial development, and potential does exist for large-scale development in the county. Population growth is definite as a result of the recent U.S. Air Force decision to locate a permanent radar bomb scoring operation and support facility near Powell. Wickersham and Associates say that the Air Force development will bring 55 servicemen and their families to the Powell area in the next few years (Powell Tribune; April 15, 1982). The opening of Amax's copper mine in Kirwin would also bring about an increase in population.

Ruth Tebbutt, IPR

Sources:

Big Horn-Park County Regional Planning Office.
Park County Land Use Survey, Park County
Board of Commissioners (1975).

Division of Business and Economic Research,
College of Commerce and Industry,
University of Wyoming. Resources and
Economy: Park County, Wyoming Natural
Resource Board (1964).

Governor's Resource Management Tour of Wyoming's
Big Horn and Park Counties (June 17-19,
1980). United States Soil Conservation
Service.

Park County Land Use Planning. Park County
Board of County Commissioners (August 30,
1979).

Simonton, Marjorie M. "Park County." Wyoming
on Review (1966).

The Wyoming Historical Record. Survey, Division
of Community Service Programs, Work
Progress Administration. Inventory of the
County Archives of Wyoming, No. 15 (Park
County), The Wyoming State Library
(January, 1942).

#

GRAPHS & TABLES

Figure 11: Energy and Mineral Production

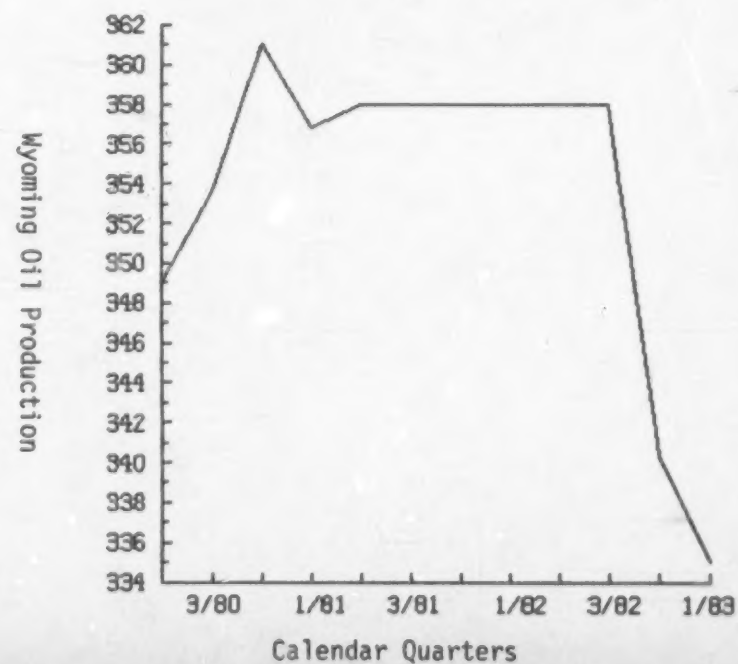
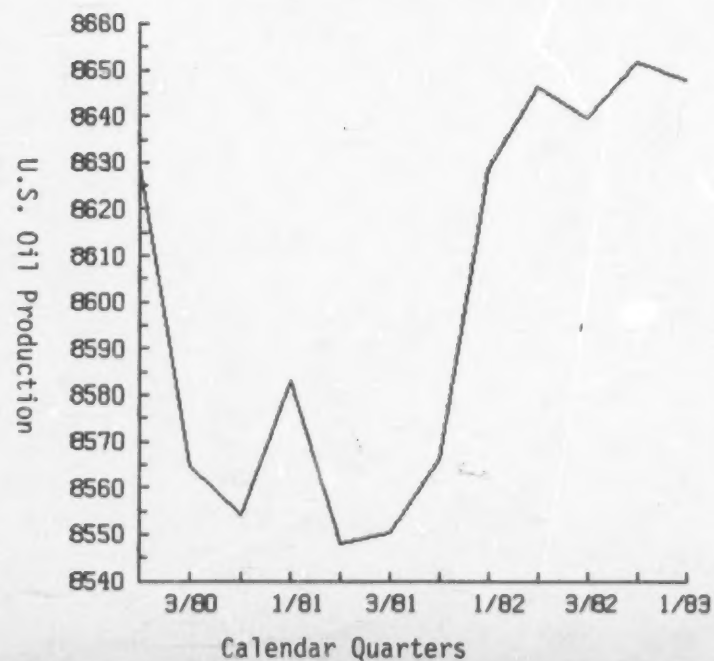
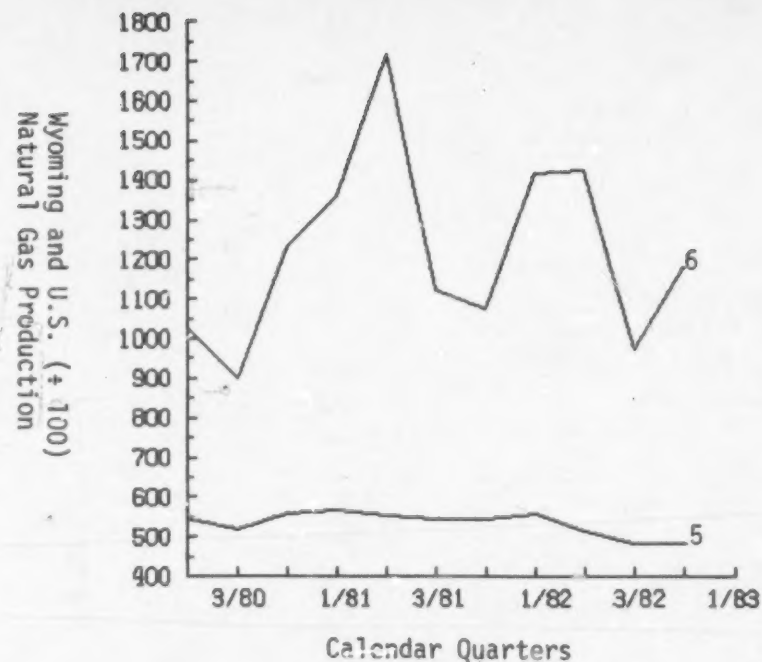
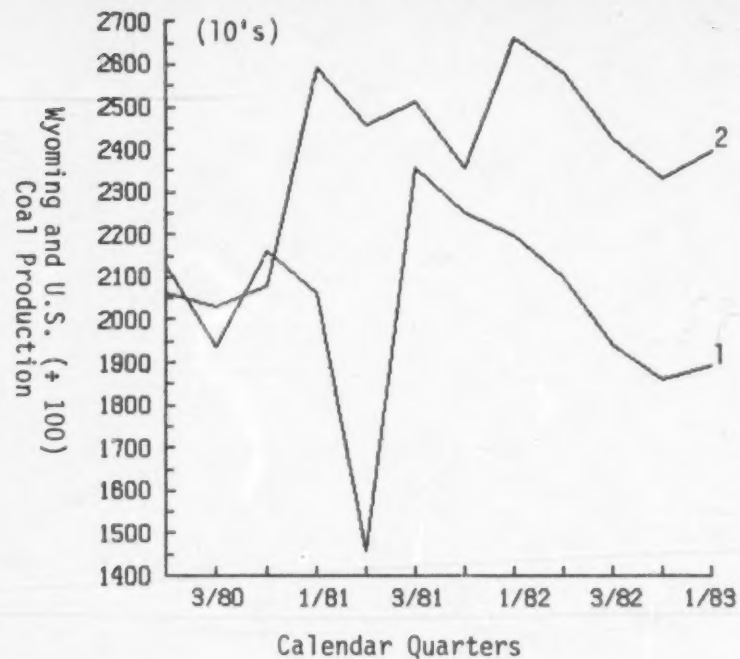


Table 9: Energy and Mineral Production¹

Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
1. Wyoming Coal (TST)	20630.	20297.	20799.	25901.	24574.	25108.	23556.	26586.	25809.	24257.	23292.	23980.
2. U.S. Coal (TST)	212651. ²	20760.	216015.	206426.	145696.	235672.	224793.	219743.	209771.	194158.	185857.	189251.
3. Wyoming Oil (TBPd)	346. ²	354.	361.	357.	358.	358.	358.	358.	358.	358.	340.	335.
4. U.S. Oil (TBPd)	8629. ²	8565.	8554.	8583.	8548.	8550.	8566.	8629.	8647.	8640.	8652.	8648.
5. Wyoming Natural Gas (MCFD)	1028.	901.	1232.	1358.	1717.	1124.	1074.	1418.	1426.	972.	1181.	INA
6. U.S. Natural Gas (MCFD)	54300.	51777.	55776.	55830.	55120.	54347.	54323.	5573.	51242.	48183.	48133.	INA

There was only a 3.0 percent increase in 1/83 Wyoming coal production over the previous quarter. Compared to the record output of 1/82, 1/83 coal production was off 9.8 percent. Nationwide, the coal industry fared only slightly better. 1/83 U.S. coal production was up only 1.8 percent from the previous quarter. However, with the beginning of a recovery from the 18-month recession, 1/83 output was 13.9 percent more than the nation's coal output during 1/82.

Lower prices depressed production of oil in Wyoming in 1/83 for the second consecutive quarter. In Wyoming, oil has flowed from wells at a rate of 358,000 barrels per day for 1½ years until 4/82 when a 5.0 percent decrease was recorded. Another drop of 1.5 percent was observed during 1/83. U.S. oil production fell 4,000 barrels per day between 4/82 and 1/83 after registering an increase between 3/82 and 4/82.

Natural gas production data are a bit less timely than coal and oil production data. Nationwide, gas production was virtually unchanged from 3/82 to 4/82. Wyoming recorded a 21.5 percent boom in gas production during that time. Compared to 4/81, Wyoming's 4/82 output was up 10.0 percent. Nationwide, natural gas production during 4/82 was down 11.4 percent compared to the same quarter a year earlier.

¹First time readers of WQU should refer to the "Format" page (in back) for an explanation of abbreviations and table formats.

²Datum shown is an estimate. Some data components are unavailable.

Sources: Series 1, 2, 5, and 6: U.S. Department of Energy. Energy Data Reports. Natural Gas Data are published monthly, and Coal Data are published weekly.

Series 3-4: The Oil and Gas Journal. U.S. and Wyoming Oil Production. Published weekly.

Figure 12: Agriculture

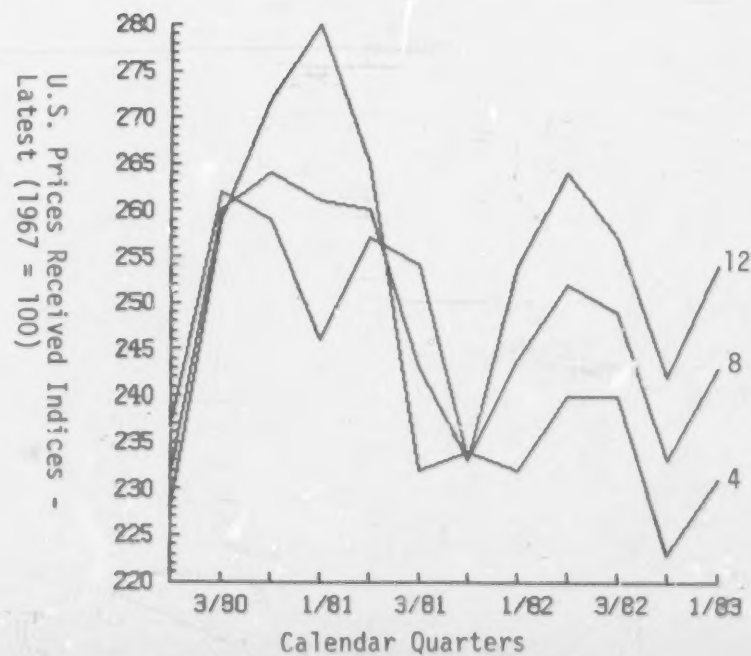
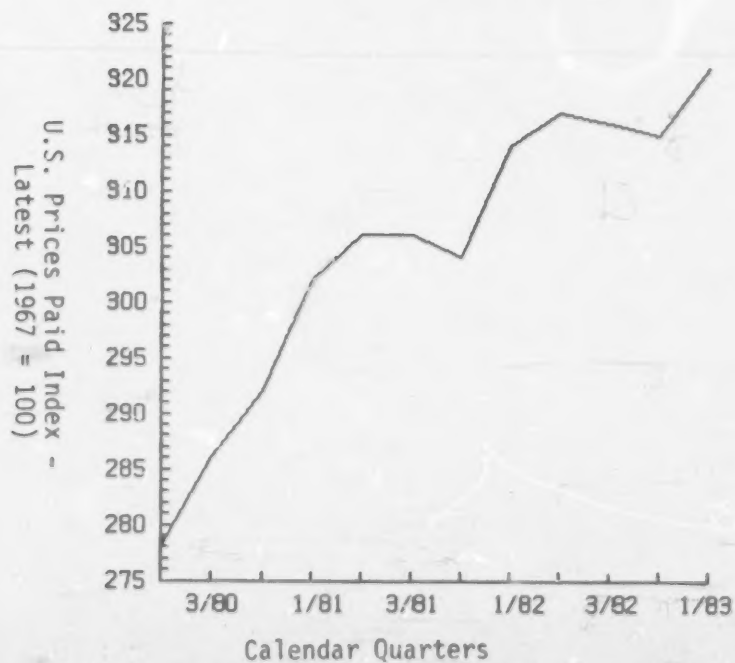
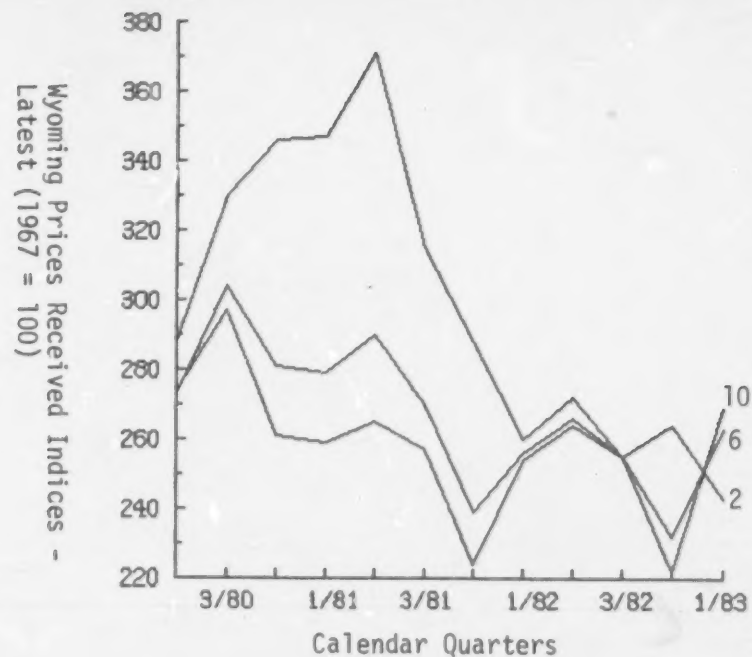
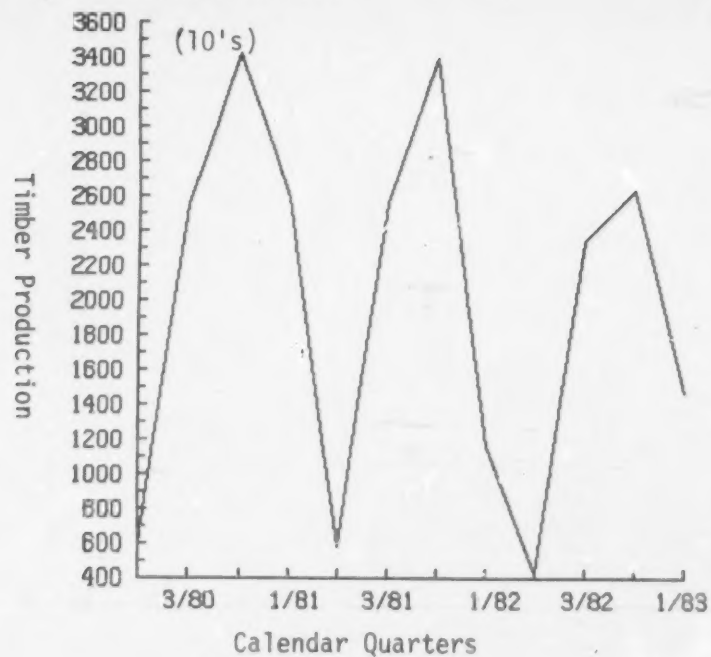


Table 10: Agriculture

Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
1. Timber Cut in Wyoming National Forests (MBF) Price Indices ¹ (1967=100)	5866.	25538.	34190.	25895.	5810.	25613.	33929.	11658.	4285.	23430.	26318.	14707.
2. Wyoming Crops, Prices Received-Latest	288.	330.	346.	347.	371.	315.	288.	260.	272.	255.	264.	243.
3. Wyoming Crops, Prices Received-Average	282.	308.	316.	350.	347.	325.	301.	275.	273.	256.	262.	250.
4. U.S. Crops, Prices Received-Latest	228.	259.	272.	280.	265.	232.	234.	232.	240.	240.	223.	231.
5. U.S. Crops, Prices Received-Average	223.	251.	267.	278.	271.	249.	232.	238.	238.	238.	223.	224.
6. Wyoming, All Commodities, Prices Received-Latest	273.	304.	281.	279.	290.	270.	239.	256.	266.	255.	232.	263.
7. Wyoming, All Commodities, Prices Received-Average	273.	285.	281.	277.	284.	267.	251.	248.	266.	251.	240.	249.
8. U.S., All Commodities, Prices Received-Latest	232.	260.	264.	261.	260.	243.	233.	244.	252.	249.	233.	243.
9. U.S., All Commodities, Prices Received-Average	229.	255.	263.	263.	260.	252.	236.	241.	250.	249.	235.	240.
10. Wyoming Livestock, Prices Received-Latest	274.	297.	261.	259.	265.	257.	224.	254.	264.	255.	222.	269.
11. Wyoming Livestock, Prices Received-Average	272.	282.	274.	255.	266.	250.	236.	239.	264.	250.	233.	249.
12. U.S. Livestock, Prices Received-Latest	237.	262.	259.	246.	257.	254.	233.	254.	264.	257.	242.	254.
13. U.S. Livestock, Prices Received-Average	234.	259.	261.	250.	251.	256.	240.	247.	262.	259.	246.	253.
14. Prices Paid by U.S. Farmers-Latest	278.	286.	292.	302.	306.	306.	304.	314.	317.	316.	315.	321.
15. Prices Paid by U.S. Farmers-Average	276.	284.	291.	300.	305.	306.	305.	313.	315.	317.	315.	320.

The expected decrease in timber production between the fourth quarter and first quarter of subsequent years was observed from 4/82 to 1/83; however, recent figures display a smaller decline than the drop in production demonstrated one year ago. Between 4/82 and 1/83, Wyoming's national forests experienced a 44.19 percent decrease in timber production compared to a 65.64 percent reduction between 4/81 and 1/82. A other bright note is the 26.15 rise in 1/83 timber cut over 1/82, representing the first boost seen in Wyoming's timber industry since the increase observed in 1/81 over 1/80--all other quarters between 1/81 and 1/83 have indicated an ebb in the industry. Those figures appear to reflect the reported rebound in the nation's housing industry.

Prices for most agricultural commodities improved from December 1982 to March 1983 for Wyoming farmers and ranchers. The March 1983 index of prices received for all commodities rose 31 points, or 13.36 percent, from December 1982. Of even greater significance is the 7 point increase which occurred in March 1983 over March 1982. Figure 12 illustrates that farmers and ranchers in the United States did not encounter the same good fortune. The March 1983 index of prices received for all commodities increased 10 points over December 1982 (a slight 4.29 percent rise), and was 1 point lower than a year ago.

¹The index for the last month (latest) of each quarter, along with the average of the three monthly indices of each quarter.

Sources: Series 1: United States Forest Service. "Timber Cut and Sold, Convertible Products." Region 2 and 4 reports published quarterly.
Series 2-15: Wyoming Crop and Livestock Reporting Service. Bi-weekly Ag Statistics.

Figure 13: Tourism

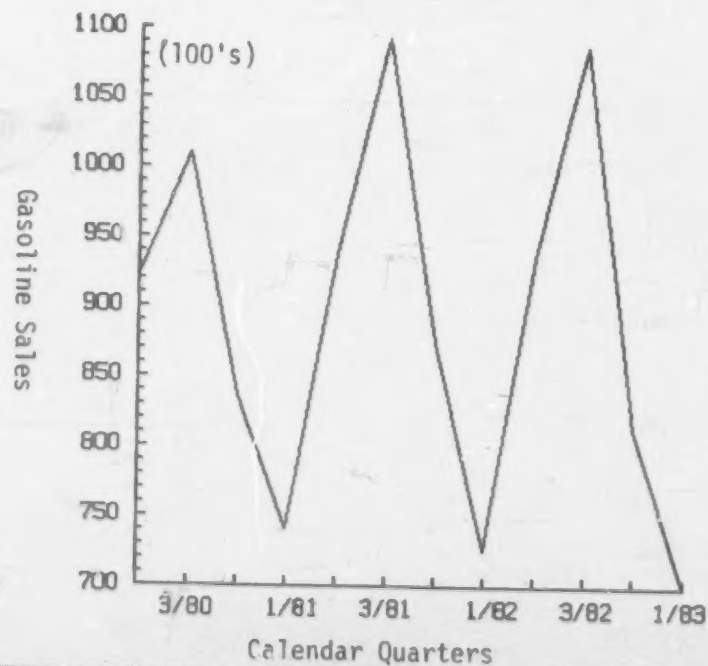
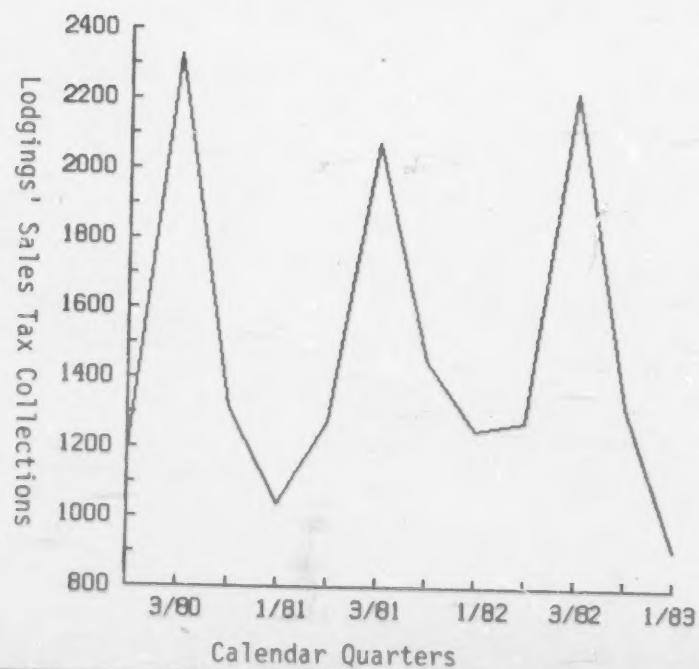
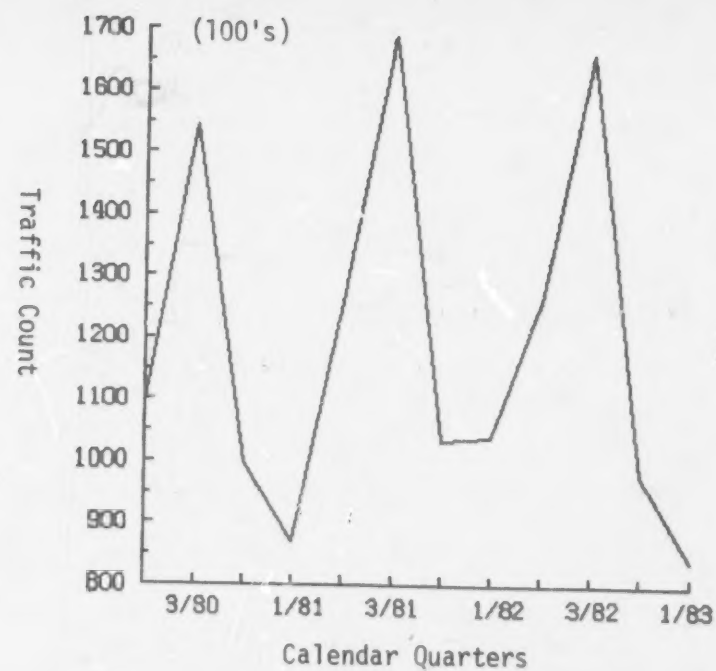
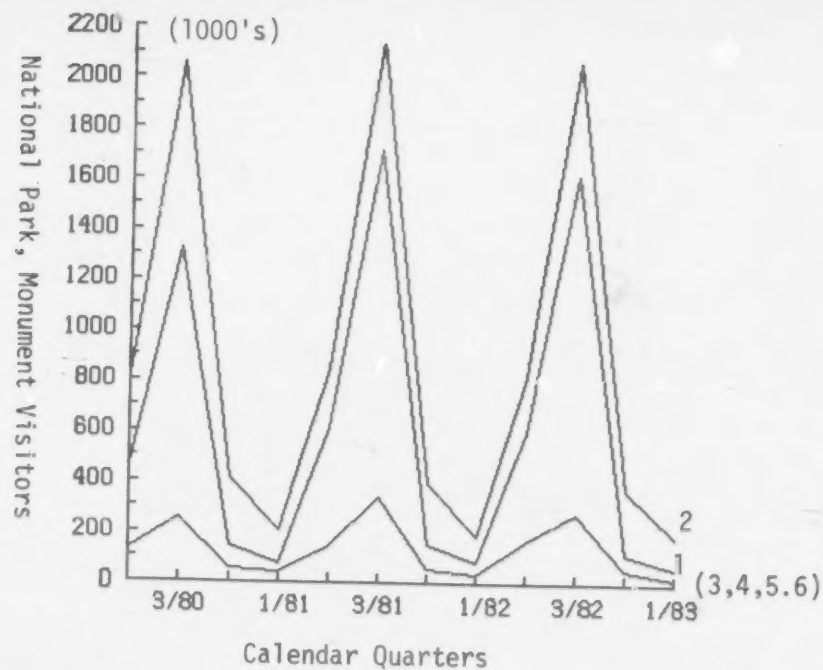


Table 11: Tourism

Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
<u>Visitors, National Parks and Monuments</u>												
1. Yellowstone	459974.	1323837.	144039.	74693.	609642.	1715175.	149682.	82758.	600071.	1614242.	116082.	65368.
2. Grand Teton	814813.	2055989.	412817.	206147.	847464.	2147775.	393843.	185935.	820236.	2066704.	371007.	183675.
3. Devil's Tower	51992.	144042.	12346.	13425.	63064.	205660.	18159.	9425.	86305.	161989.	13232.	912.
4. Fossil Butte	2864.	6857.	1421.	339.	3795.	7769.	1018.	596.	6691.	10303.	1601.	626.
5. Fort Laramie	27621.	52608.	6337.	6309.	40192.	64598.	10190.	5037.	31447.	51881.	6906.	4887.
6. Big Horn NRA-South ¹	45481.	49499.	35422.	18509.	34846.	56566.	27820.	17701.	42059.	53839.	30720.	13428.
<u>Other Tourism Indicators</u>												
7. Traffic Count (Avg. # of Vehicles/Day)	109530.	154224.	99772.	86957.	125992.	169095.	103438.	103864.	126037.	166170.	97892.	84187.
8. Hotel, Motel, and Camp Sales Tax (T\$)	1189.	2326.	1315.	1036.	1272.	2073.	1447.	1247.	1273.	2226.	1323.	912. ²
9. Gasoline Sales (TGL)	92212.	101005.	83626.	74027.	93721.	109335.	87500.	72548.	93556.	108718.	81347.	70000. ²

Despite very good weather for the first two months of 1/83, visitation at each of Wyoming's national parks and monuments was down from 1/82. Also, the usual decline between the fourth quarter of a previous year and the first quarter following was observed. While the relative importance of various factors affecting visitation during winter months is hard to assess, the fact that the nation was at or near the low point of the recession late in 4/82 and early in 1/83 was surely significant. Wyoming's major attractions, Yellowstone and Grand Teton, registered 21.0 and 1.2 percent declines, respectively, between 1/82 and 1/83.

Despite lower fuel prices, the traffic count fell sharply (-18.9%) in 1/83, when compared to 1/82. Significant slippage was also evident in the use of motel and hotel accommodations. Sales tax collections during 1/83 from those establishments was off 26.9 percent from 1/82. The estimate of 4/82 gasoline sales published in the last WQU overshot the actual figure shown above by 8.2 percent. Consequently, the estimate of 1/83 gasoline sales shown above is a conservative 3.6 percent below the 1/82 level. However, with gasoline prices falling significantly during 1/83, it may prove to be too conservative.

¹Big Horn Canyon N.R.A. is only partially in Wyoming. Only visitation for the Wyoming part is shown.

²Estimate based on trend and actual data for January.

Sources: Series 1-6: Monthly visitor use reports of the National Park Service.
 Series 7: Traffic Survey Unit - Planning Branch, Wyoming State Highway Department. "Selected Recording Stations Traffic Counter Data." Published monthly.
 Series 8: Wyoming Department of Revenue and Taxation monthly report.
 Series 9: Petroleum Association of Wyoming. Monthly Gasoline Gallonage Report.

Figure 14: Employment and Labor

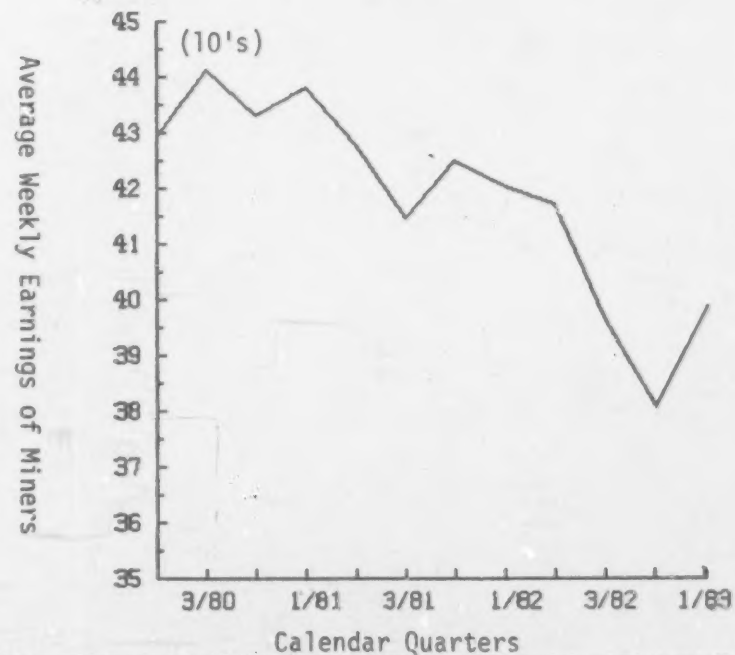
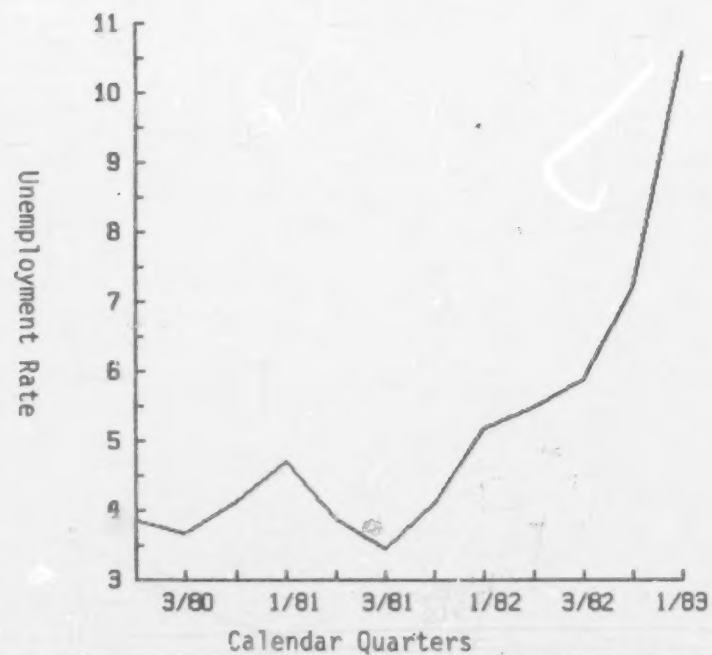
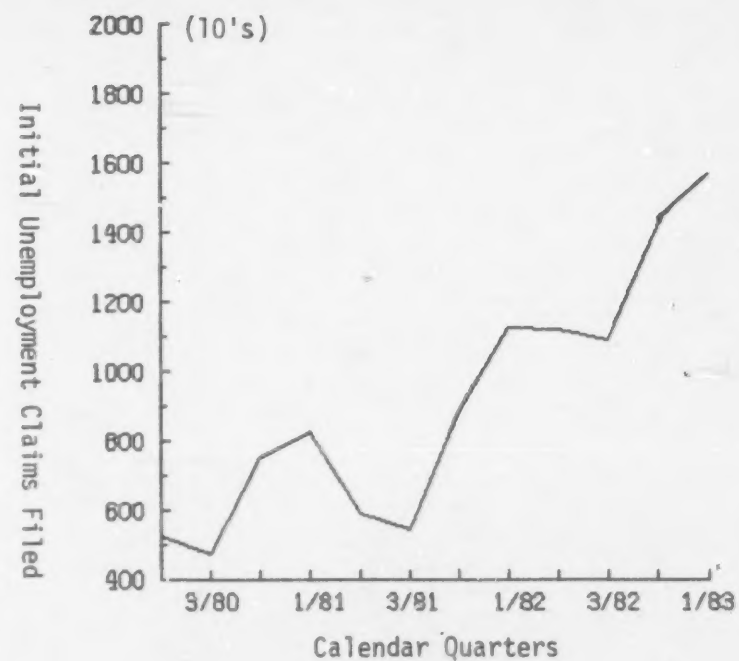
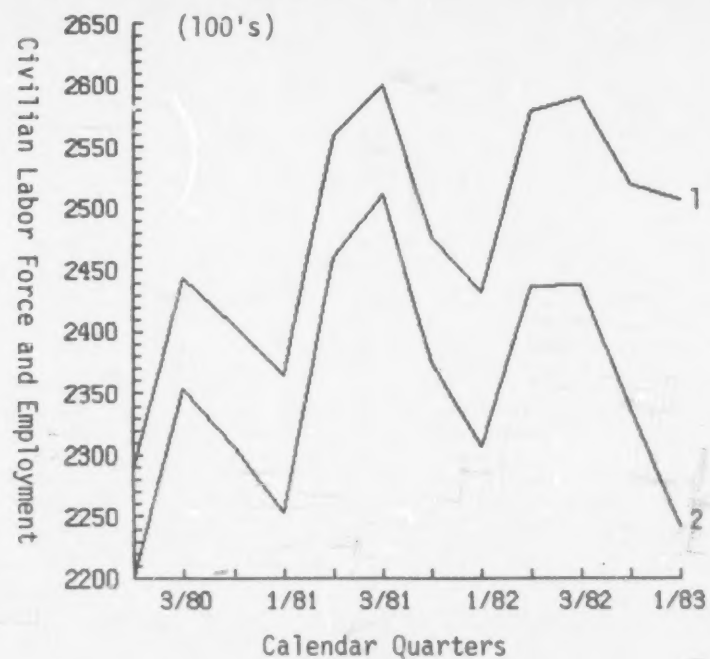


Table 12: Employment and Labor¹

Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
1. Civilian Labor Force	355.	240566.	236480.	255956.	260041.	247523.	243298.	257820.	258974.	251909.	250727.
2. Employment	3404.	230685.	225414.	246075.	251110.	237402.	230717.	243696.	243798.	233790.	224223.
3. Unemployment	3951.	9881.	11066.	9881.	8931.	10121.	12581.	14123.	15177.	18120.	26503.
4. WY Unemployment Rate	3.6	3.7	4.1	3.9	3.4	4.1	5.2	5.5	5.9	7.2	10.6
5. US Unemployment Rate		7.5	7.0	8.0	7.3	7.3	9.5	9.3	9.7	10.3	11.2
6. Initial Claims Filed	4745.	7494.	8231.	5901.	5463.	8837.	11237.	11225.	10894.	14183.	15650.
7. Applications Received	12727.	9584.	13026.	13522.	13884.	10000.	12070.	14838.	15359.	13112.	12950.
8. New Non-Agricultural Openings	9217.	11068.	7526.	6912.	9903.	12991.	6300. ²	6119.	8344.	9190.	7035.
9. New Non-Agricultural Placements	7848.	9218.	6482.	5649.	7681.	10072.	5850. ²	5138.	7161.	8079.	5450.
10. Miners' Average Weekly Hours	42.9	44.1	43.3	43.8	42.8	41.5	42.5	42.0	41.7	39.7	38.1
11. Miners' Average Weekly Pay (\$)	425.31	438.97	429.26	448.66	453.75	447.13	459.64	476.53	480.37	465.42	464.35
12. Miners' Average Hourly Wage (\$)	9.91	9.95	9.91	10.24	10.61	10.78	10.81	11.34	11.52	11.90	12.18

As 1/83 ended, Wyoming's unemployment rate reached, and then surpassed the unadjusted national unemployment rate. For the entire first quarter, the national jobless rate of 11.2 percent still stood 0.6 of a percentage point above Wyoming's. However, during March, the final month of 1/83, Wyoming's unemployment rate had reached 10.9 percent, while the national jobless rate had fallen to 10.8 percent. By April, Wyoming's jobless rate had reached 11.0 percent. The meteoric rise of Wyoming's unemployment rate in recent months is demonstrated by adjacent Figure 14. A word of caution for the reader: the unadjusted U.S. unemployment rates printed above and discussed here should not be confused with the seasonally adjusted rates usually reported by the news media.

Since 1/82, Wyoming's jobless rate has more than doubled, and the other data also reflect the deterioration, during that time, in the state's labor market conditions. Initial claims filed were up 39.3 percent between 1/82 and 1/83. Reported openings and placements were off 22.8 and 20.1 percent between 1/82 and 1/83, respectively. The declines in placements and openings, the increase in initial claims filed and the unemployment rate were particularly sharp during the most recent quarters shown. The number of applications for employment received has fallen during each of the two most recent quarters, but that could be due as much, or perhaps more, to an increase in the number of discouraged workers (those workers who have given up applying for work), and to a reduction in the rate of immigration of new workers into Wyoming.

Although the average weekly hours of Wyoming miners during 1/83 was down 5.2 percent from 1/83, the statistics for miners' weekly hours does offer some encouragement. Whereas most labor market statistics are lagging indicators of economic conditions, the average work week is widely regarded as a leading indicator. That is, it foreshadows future economic conditions. Between 4/82 and 1/83, the length of the average work week in Wyoming's key mining sector increased 4.5 percent. As a result, the average miner's average weekly paycheck rose 4.4 percent between 4/82 and 1/83, the first increase during the last three quarters. It's too soon to call the 4/82-1/83 increase in the length of the average work week a trend, especially since the monthly data indicate that the work week was slightly shorter in February and March than in January. Nevertheless, the news suggests an improvement in conditions.

¹The most recent year's data are preliminary.

²Estimated. October and November, 1981 data are not available.

³Not seasonally adjusted.

Sources: Series 1-4, 6-12: Wyoming Employment Security Commission. Labor Force Trends. Published quarterly.

Series 5: U.S. Department of Commerce, Bureau of Economic Analysis. Survey of Current Business. Published monthly.

Figure 15: Business Conditions

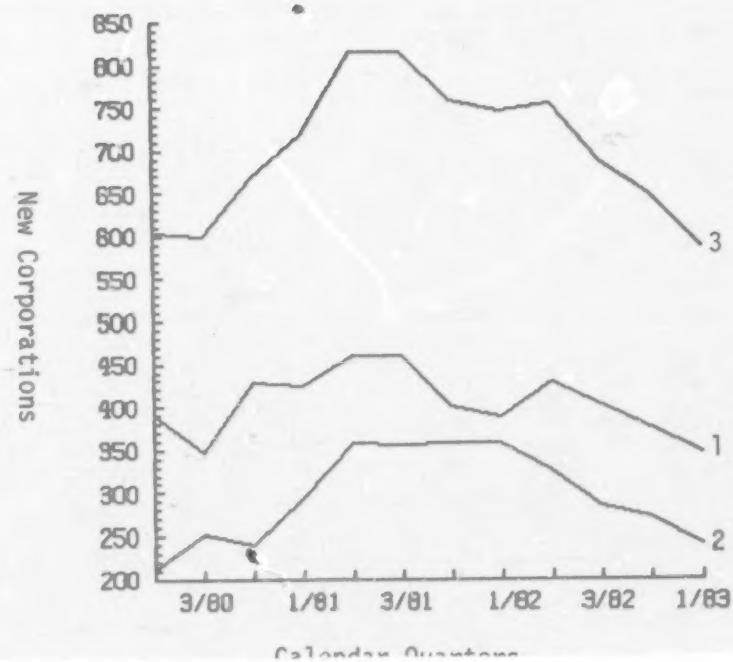
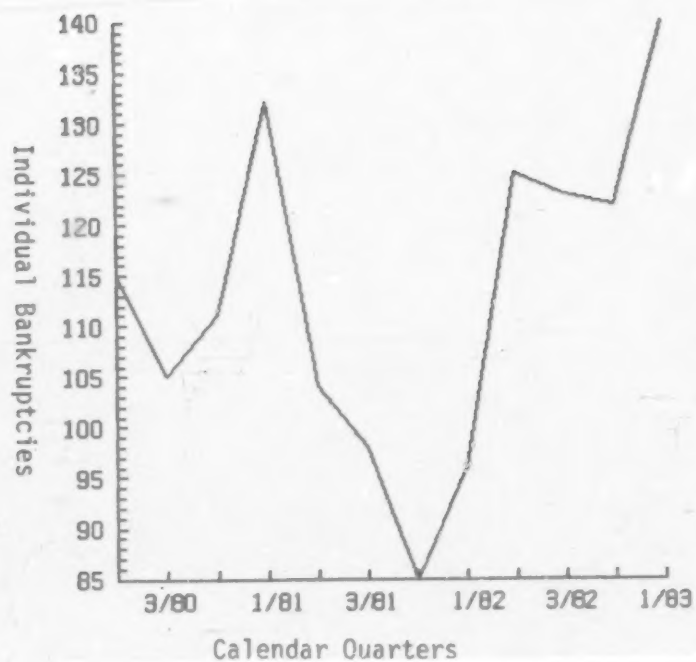
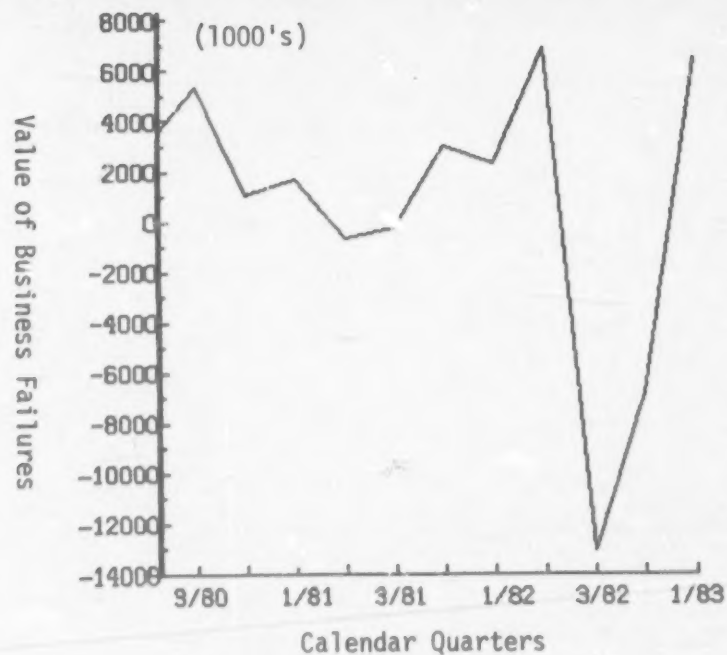
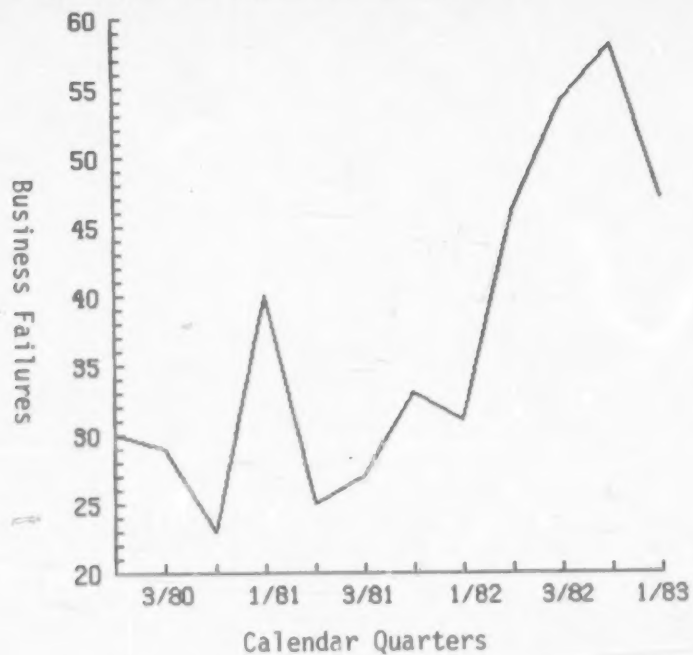


Table 13: Business Conditions

Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
1. New Domestic Corporations	391.	348.	429.	424.	459.	459.	400.	389.	428.	403.	377.	348.
2. New Foreign Corporations	212.	252.	239.	294.	357.	356.	358.	357.	326.	285.	272.	240.
3. Total New Corporations	603.	600.	668.	718.	816.	815.	758.	746.	754.	688.	649.	588.
4. Business Failures	30.	29.	23.	40.	25.	27.	33.	31.	46.	54.	58.	47.
5. Value of Business Failures (\$)	3020063.	5306348.	1054339.	1674135.	-635217. ¹	-240995. ¹	2987139.	2331991.	6842595.	-13034324. ¹	-6860186. ¹	6438421.
6. Personal Bankruptcies	115.	105.	111.	132.	104.	98.	85.	96.	125.	123.	122.	140.

The recession's arrival in Wyoming continues to be reflected in the number of new corporations registering to do business in Wyoming. The declines in new domestic and foreign corporations between 3/82 and 4/82 were 6.5 and 4.6 percent, respectively. Between 4/82 and 1/83 the rate of decline accelerated slightly to -7.7 and -11.8 percent, respectively.

The number of business failures during 1/83 fell by 19.0 percent from its record high of 58 during 4/82. However, the value of the failures increased from -\$6.86 million (assets exceeding liabilities) during 4/82 to \$6.44 million (liabilities exceeding assets) during 1/83. The number of personal bankruptcies reached a new record high in 1/83, rising approximately 12 percent compared to the virtually constant level recorded during each of the previous three quarters.

¹ Assets exceed liabilities.

Sources: Series 1-3: Secretary of State. New and Foreign Corporations. Monthly report.

Series 4-6: Cheyenne Credit Bureau. Wyoming bankruptcy cases, business failures, and value of failures. Weekly publication.

Figure 16: Construction

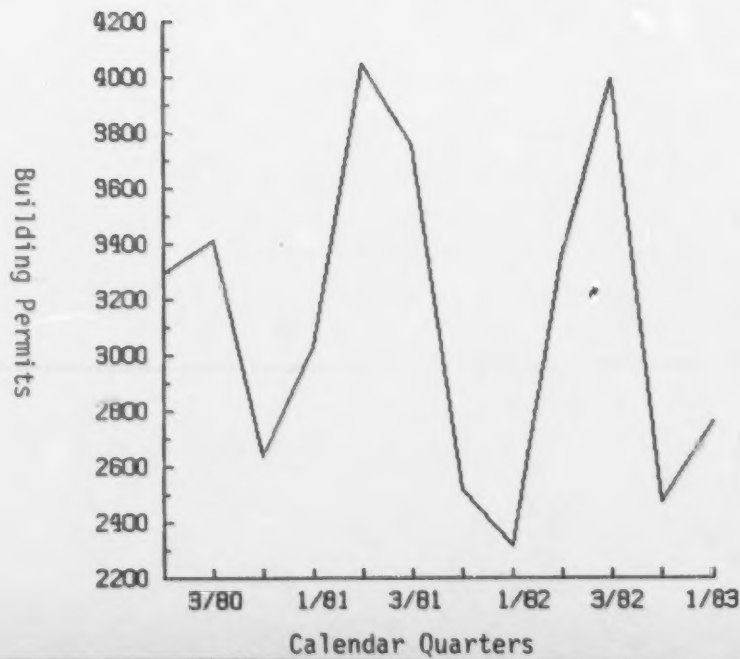
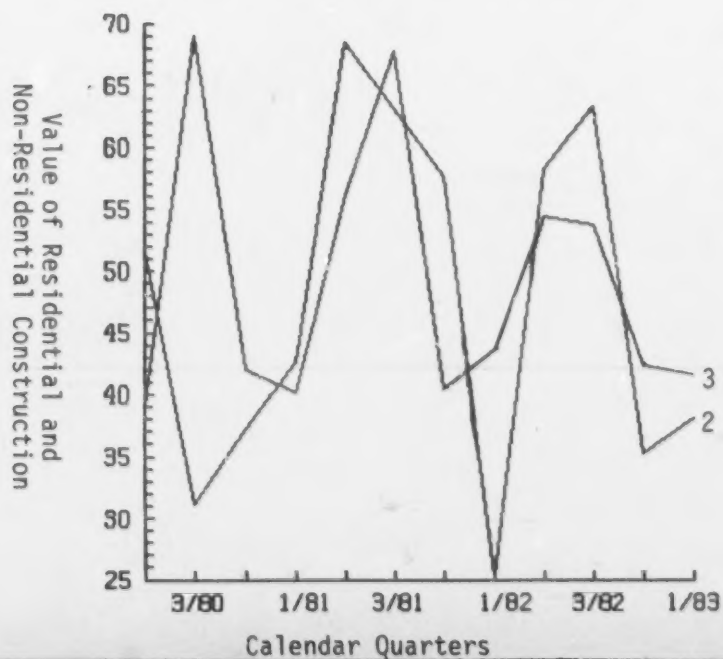
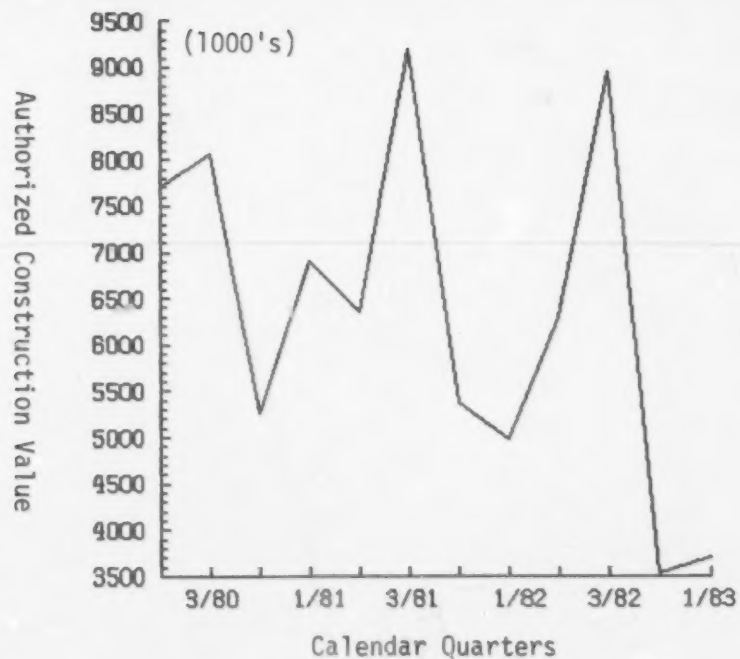
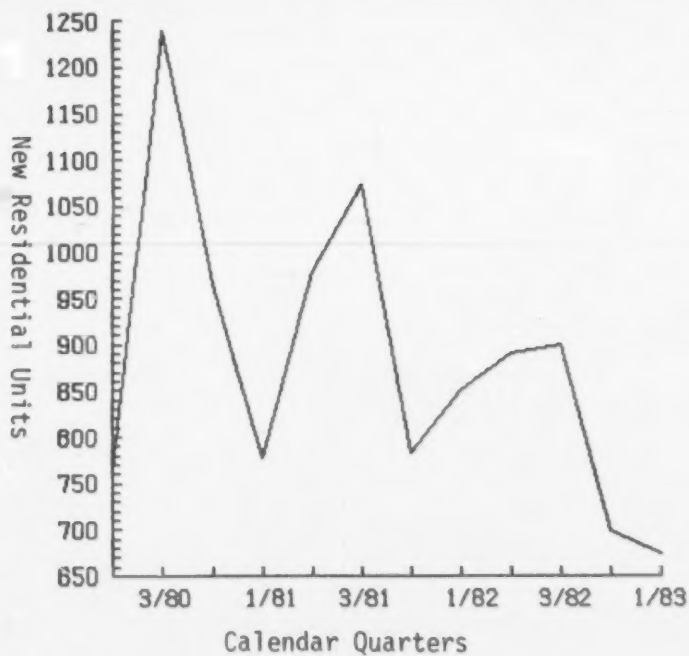


Table 14: Construction

Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
1. New Residential Dwelling Units	762.	1240.	965.	777.	978.	1072.	784.	851.	891.	900.	699.	675.
2. Value of Residential Dwellings Constructed (M\$)	39.0	69.0	42.0	40.2	56.1	67.8	40.4	43.4	54.3	53.6	42.3	41.7
3. Value of Nonresidential Construction (M\$)	51.5	31.2	37.2	42.6	68.5	63.1	57.6	25.2	58.1	63.2	35.2	38.0
4. Building Permits Issued in Selected Wyoming Cities	3293.	3414.	2637.	3027.	4040.	3755.	2516.	2317.	3353.	3992.	2473.	2762.
5. Value of Authorized Construction	77045.	80648.	52550.	68995.	63557.	91789.	53839.	49768.	62939.	89434.	35383.	37119.
6. Mortgage Interest Rate ¹	12.24	11.95	12.86	13.48	14.12	14.69	15.23	14.93	14.74	14.34	13.09	12.97

Wyoming's economic downturn is reflected in the data for new residential dwelling units. The number of units constructed during 1/83 was a record low, eclipsing the previous record low of 699 new units constructed in 4/82 by 3.4 percent. The 675 units constructed during 1/83 represent a 20.7 percent decline from 1/82. Despite the substantial drop in the number of new dwelling units, the value of new residential construction during 1/83 was only off 3.9 and 1.4 percent from 1/82 and 4/82, respectively. That suggests an increase in the price of new homes and a shift by builders towards the construction of more expensive dwellings.

Nonresidential construction during 1/83 registered a hefty 50.8 percent increase over 1/82, and a more modest 8.0 percent from the preceding quarter. By far the largest components of 1/83 nonresidential construction were government buildings and schools.

The number of new building permits issued during 1/83 were up significantly from both 1/82 (+19.2 percent) and 4/82 (+11.7 percent). However, the value of the construction authorized by those permits is off 25.4 percent from 1/82, and up only 4.9 percent from 4/82.

Mortgage interest rates continue to decline from their 4/81 peak of 15.23 percent. However, the rate of decrease seems to be slowing, and with federal government budget deficits in excess of \$200 billion per year looming on the horizon, mortgage interest rates may not fall much lower. Between 4/82 and 1/83, mortgage rates, on average, fell only 0.9 percent. On June 8, the interest rate for government-backed loans rose $\frac{1}{2}$ a percentage point to 12.0 percent, the first increase in over 16 months.

¹Conventional first mortgage for new home purchase. U.S. average for last month of the quarter.

Sources: Series 1-3: F.W. Dodge Division of McGraw-Hill. "Dodge Construction Potentials." Published monthly.

Series 4-5: Institute for Policy Research. "Local Construction Reports." Survey of authorized construction in selected cities conducted monthly.

Figure 17: Utilities

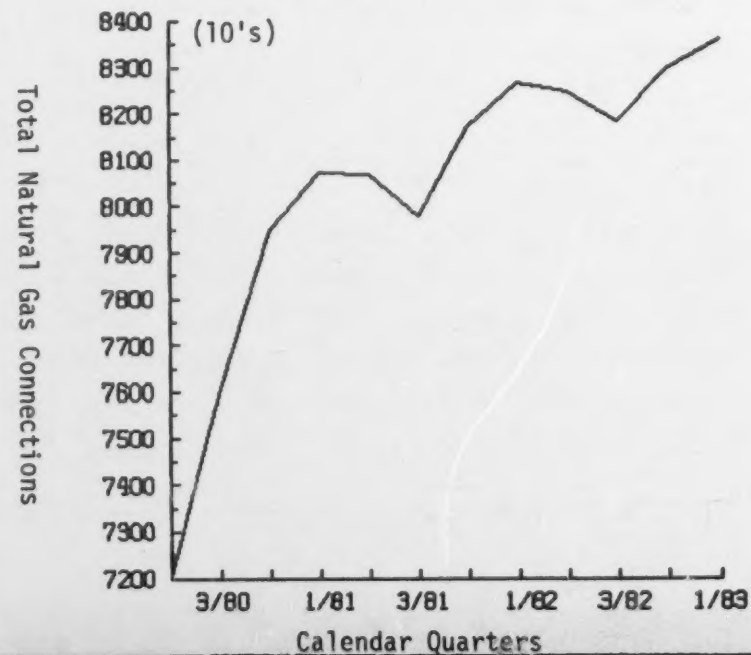
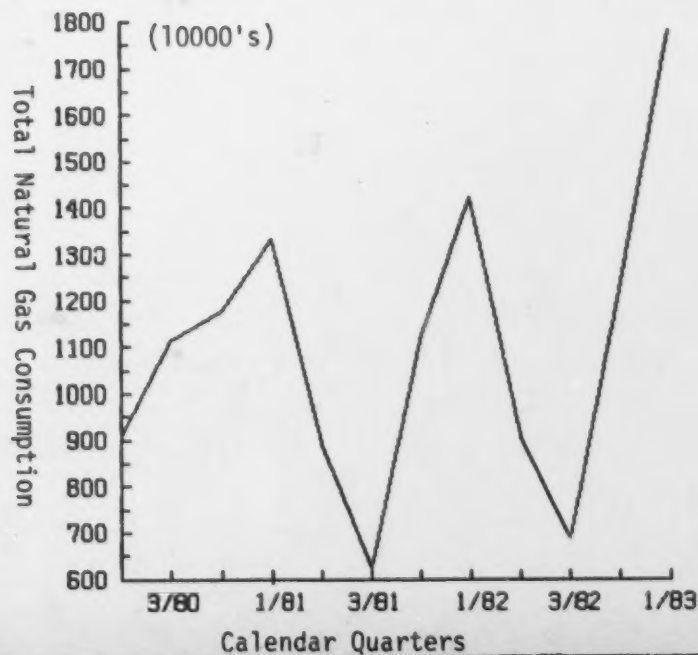
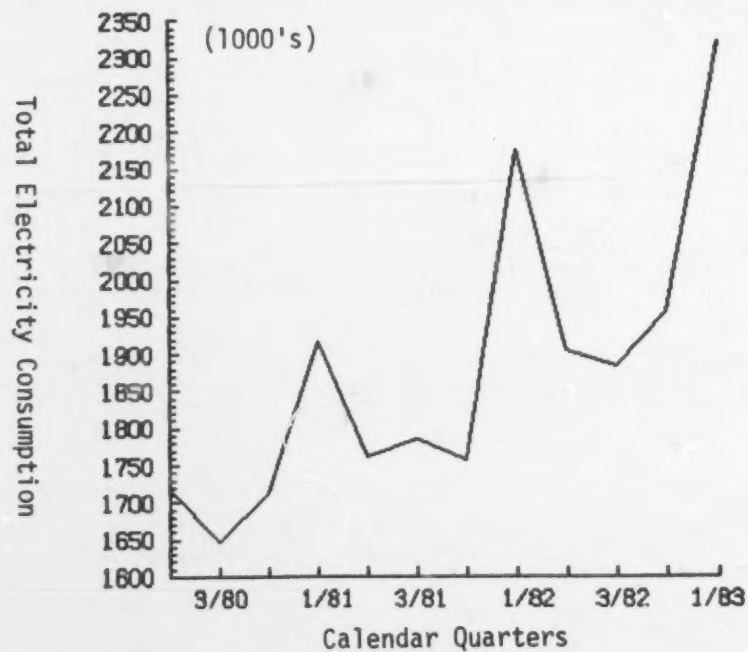
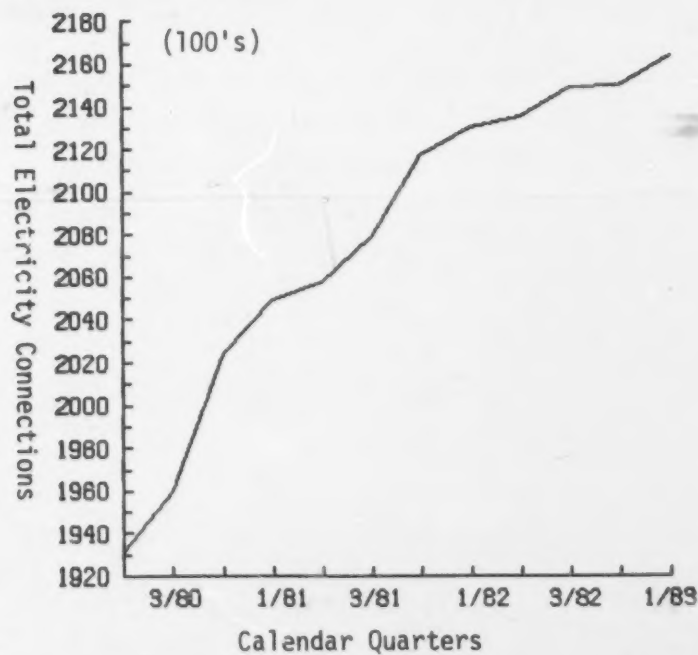


Table 15: Utilities¹

Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
1. Residential Electric Connections	158424.	160950.	166342.	168477.	169494.	169777.	174369.	174018.	174126.	177081.	177968.	179111.
2. Residential Electric Consumption (TKWH)	319866.	264960.	335159.	487386.	331256.	282226.	218361.	504636.	375401.	302786.	391938.	489894.
3. Commercial Electric Connections	27772.	28072.	28847.	29465.	29605.	30522.	30047.	30833.	31086.	30841.	30388.	30772.
4. Commercial Electric Consumption (TKWH)	267804.	287954.	271561.	298580.	288617.	317998.	303091.	354594.	319879.	331351.	327961.	351627.
5. Industrial Electric Connections	2957.	3057.	3312.	3377.	3384.	3484.	3590.	3581.	3451.	3702.	3751.	3647.
6. Industrial Electric Consumption (TKWH)	1096646.	1013672.	1049382.	1100964.	1097628.	1112398.	1156967.	1266782.	1179112.	1178792.	1225845.	1471528.
7. Other Connections	3986.	3875.	3946.	3579.	3266.	4102.	3652.	4520.	4778.	3243.	2857.	2819.
8. Other Consumption (TKWH)	34114.	80540.	55639.	30333.	45006.	72994.	79409.	48237.	31570.	70139.	12240.	6780.
9. Residential Natural Gas Connections	65731.	69297.	72468.	73699.	73712.	72966.	74828.	75677.	75413.	74861.	75955.	76567.
10. Residential Natural Gas Consumption (TCF)	2311300.	787701.	2770400.	3923502.	2180779.	814900.	2499236.	4607468.	2504865.	872772.	2972244.	6531664.
11. Commercial Natural Gas Connections	6026.	6360.	6561.	6595.	6557.	6385.	6393.	6482.	6552.	6452.	6476.	6873.
12. Commercial Natural Gas Consumption (TCF)	976489.	347976.	1125956.	1766515.	970295.	382137.	943319.	1955899.	1075767.	385052.	1196763.	3667569.
13. Industrial Natural Gas Connections	97.	91.	93.	92.	94.	90.	89.	89.	90.	90.	95.	97.
14. Industrial Natural Gas Consumption (TCF)	5564123.	9887644.	7647357.	7345317.	5607535.	4959825.	7479593.	7328389.	5335475.	5564715.	7919440.	7626560.
15. Other Natural Gas Connections	216.	342.	363.	348.	344.	349.	398.	400.	404.	409.	409.	48.
16. Other Natural Gas Consumption (TCF)	261674.	98459.	204268.	252249.	147575.	87695.	196349.	299920.	134722.	44697.	138389.	176.
17. Business Telephone Connections	43347.	44319.	44702.	45795.	45495.	47932.	47828.	48501.	49003.	49179.	48824.	48052.
18. Private Telephone Connections	152883.	153874.	156290.	158740.	159456.	160688.	163100.	163790.	162953.	162126.	162394.	160658.

Figure 17 shows the effect of the rise in residential and commercial electric connections during 1/83 on total electricity connections, which also increased despite a drop in industrial and "other" connections. Total electricity consumption followed the trend, and at a higher rate, due to the 25.10 percent, 7.22 percent, and 20.04 percent increase in residential, commercial, and industrial consumption, respectively.

Seasonal variability is seen more clearly in the number of gas connections and gas consumption (again refer to Figure 17). Commercial, and industrial connections were the major factors for the rise in total gas connections in 1/83 over 4/82: commercial connections grew 6.1 percent, while industrial connections stepped up 2.1 percent. The 119.8 percent increase in residential gas consumption and 206.5 percent increase in commercial gas consumption were slightly tamed by a 3.7 percent and 99.87 percent decline in industrial and "other" gas consumption, respectively; nevertheless, Figure 17 shows that total natural gas consumption continued its seasonal upswing during 1/83.

¹Some small utilities do not report, hence the data are slightly less than actual state totals. The data are consistent. The same utilities' reports are included in each figure.

²"Other" includes agriculture, municipal, and other public.

Source: Reports to IPR by selected Electric, Natural Gas, and Telephone Utility Companies. Survey conducted monthly.

Figure 18: Consumers

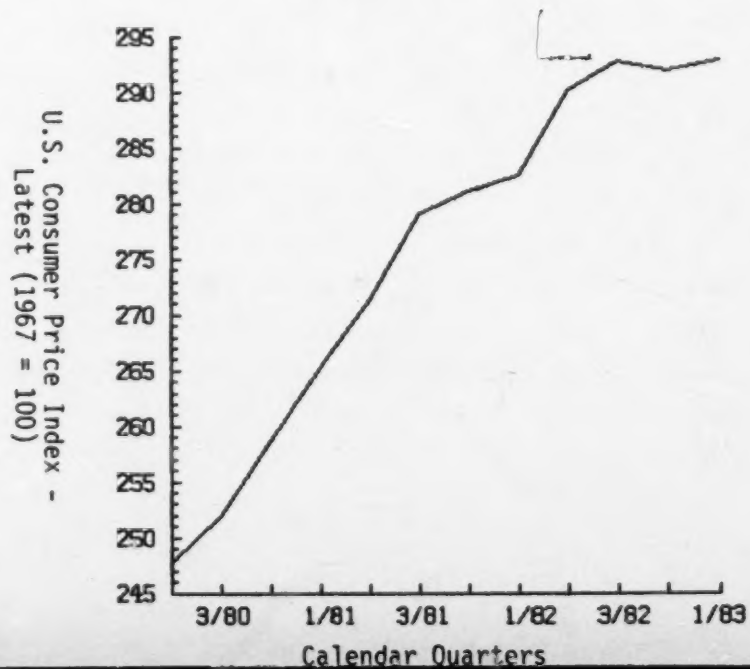
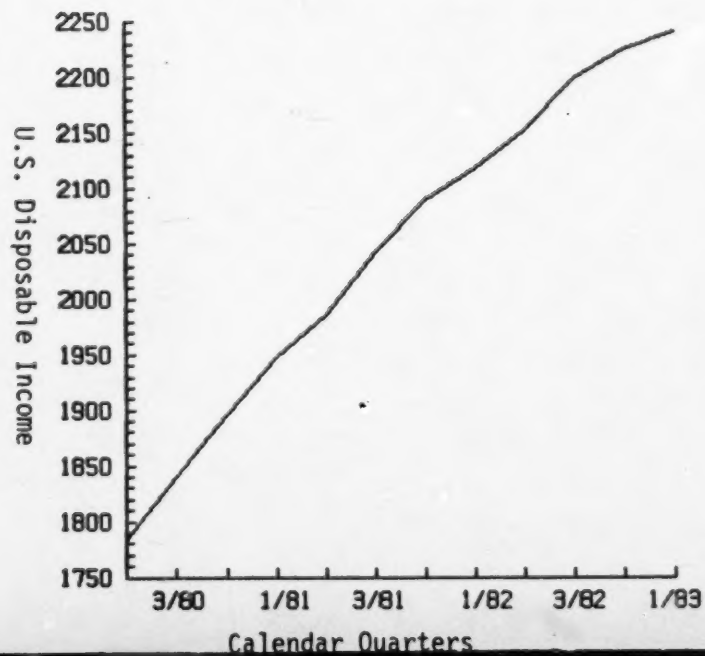
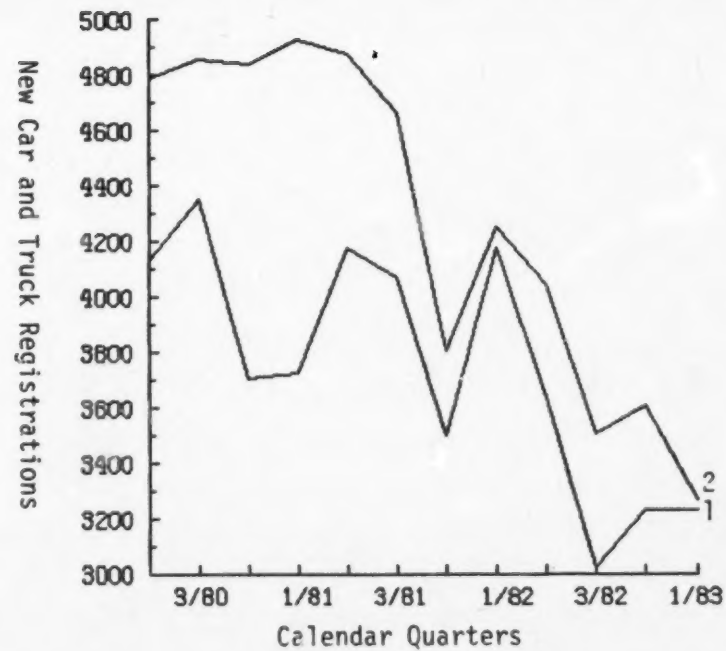
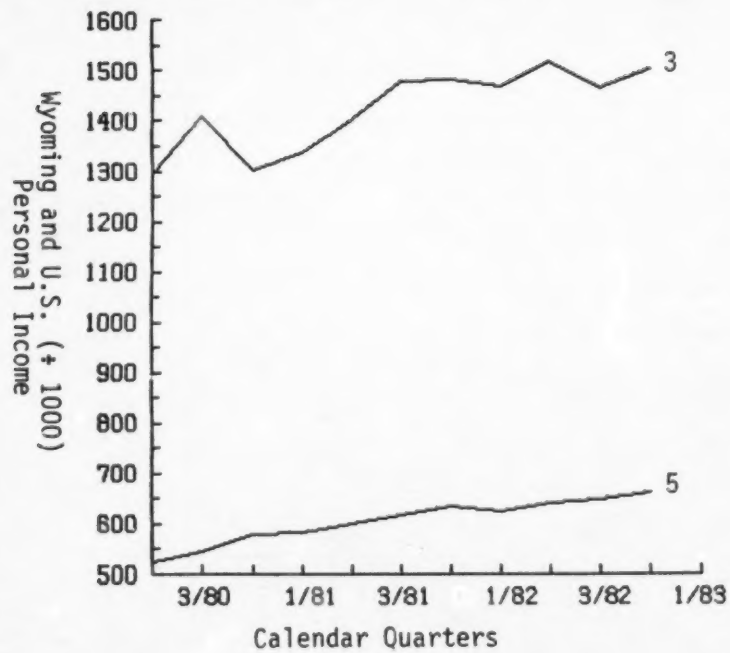


Table 16: Consumers

Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
1. New Truck Registrations	4134.	4353.	3706.	3723.	4175.	4067.	3502.	4176.	3636.	3024.	3230.	3233.
2. New Car Registrations	4787.	4859.	4839.	4926.	4879.	4664.	3808.	4249.	4042.	3506.	3610.	3272.
3. Wyoming Personal Income (M\$)	1296.	1409.	1303.	1337.	1403.	1477.	1474.	1472.	1516.	1465.	1470.	1380. ¹
4. US Disposable Income ² (B\$)	1784.	1841.	1897.	1948.	1986.	2042.	2088.	2117.	2151.	2198.	2224.	2247.
5. US Personal Income (M\$)	524735.	543122.	579903.	581161.	601311.	615581.	632052.	623086.	651570.	647457.	657683.	650000. ¹
6. Latest US Consumer ³ Price Index (1967=100)	247.8	251.9	258.7	265.2	271.4	279.1	281.1	282.5	290.1	292.8	292.0	293.0
7. Quarter's Average US CPI	245.2	249.8	256.4	263.1	269.1	276.7	280.4	281.9	286.8	292.3	292.9	292.5
8. Liquor Sales (T\$)	7696.	8951.	11280.	6845.	9397.	9396.	11365.	7789.	9057.	8917.	10464.	7102.

Preliminary data for the first two months of 1/83 clearly reflect Wyoming's sudden plunge into a recession. If 1/83 Wyoming personal income data are consistent with the early figures for January and February, a 6.1 percent decline from 4/82 will be recorded. The drop-off in Wyoming's personal income between 1/82 and 1/83 was 6.3 percent, more than seven percent in real terms. Wyoming's inflation rate between 1/82 and 1/83 fell short of one percent, while, nationwide, it stood at 3.7 percent during that time. Between 4/82 and 1/83 the nation's consumer price index advanced at a barely perceptible 1.4 percent annual rate.

U.S. Disposable income data for 1/83 reflect the continuation of a steady longterm growth trend. Disposable income rose 6.1 percent between 1/82 and 1/83; a small increase considering the rate of inflation during that time, the enactment of a 10 percent tax cut, and the beginning of a recovery from the recession. Preliminary data for 1/83 U.S. personal income suggests a small decline of 1.2 percent from the previous quarter, and a 4.3 percent over a year ago.

New car and truck registrations during 1/83 are consistent with the personal income data for Wyoming. Durable goods purchases are usually among the first casualties of a recession, and that is seen here. Compared to 1/82, the number of new cars and trucks purchased during 1/83 was off 23.0 and 22.6 percent, respectively.

Liquor sales followed the usual seasonal pattern. Sales during 1/83 were off 32.1 percent from the previous quarter, and down 8.8 percent from 1/82. However, the significance of the drop between 1/82 and 1/83 becomes less clear when one notes that 1/83 sales were 3.8 percent greater than during 1/81 when economic times were better. Allowing for inflation during those two years, means the change between 1/81 and 1/83 was a drop in liquor sales in real terms, but a smaller drop than seen between 1/82 and 1/83.

¹Preliminary. An estimate based on trend and first two months of the quarter.

²Seasonally adjusted at annual rates.

³Number shown is for the last month of the quarter.

Sources: Series 1-2: R.L. Polk and Compnay Motor Statistical Division. "National New Vehicle Registration Service." Published monthly.
 Series 3,5: Business Week. Monthly personal income for states, regions, and the U.S. Reported monthly.
 Series 4,6,7: US Department of Commerce, Bureau of Economic Analysis. Survey of Current Business. Published monthly.
 Series 8: Wyoming Liquor Commission. Sales data are reported to IPR.

Consumers

Wyoming Comparative Cost of Living Index* (April 6-8, 1983): Cheyenne = 100

City	Rank	All Items	Food	Housing	Transportation	Medical
Jackson	1	130.84	104.22	165.91	100.36	110.19
Evanston	2	114.25	106.04	126.18	103.72	106.51
Pinedale	3	113.99	110.21	125.21	102.42	104.77
Gillette	4	111.29	110.25	120.31	102.77	106.54
Kemmerer	5	109.61	104.45	116.74	99.42	109.70
Casper	6	109.49	109.79	112.37	107.51	112.23
Rock Springs	7	108.12	105.85	115.05	102.06	100.91
Sheridan	8	105.06	109.01	106.18	98.27	103.54
Riverton	9	104.03	106.36	104.49	101.74	103.76
Cody	10	103.90	110.36	104.06	98.71	103.74
Douglas	11	103.58	102.00	103.95	102.68	108.24
Thermopolis	12	103.56	115.94	101.16	98.10	100.66
Buffalo	13	103.44	106.61	103.26	96.88	106.25
Sundance	14	102.41	111.98	100.03	98.87	102.20
Laramie	15	102.26	100.17	104.60	98.39	97.52
Newcastle	16	102.22	97.87	107.05	96.10	106.88
Rawlins	17	100.83	105.12	101.84	100.78	100.52
Worland	18	100.49	108.81	97.92	96.92	103.91
Cheyenne	19	100.00	100.00	100.00	100.00	100.00
Wheatland	20	97.93	104.53	90.33	101.27	102.07
Greybull	21	95.75	100.24	84.41	100.98	102.23
Lusk	22	94.10	104.52	82.74	98.93	100.17
Torrington	23	91.81	98.52	82.63	96.73	98.57

Wyoming Comparative Cost of Living Index* (January 5-7, 1983): Cheyenne = 100

City	Rank	All Items	Food	Housing	Transportation	Medical
Jackson	1	133.86	114.61	168.04	102.07	107.00
Gillette	2	116.55	113.94	130.34	104.09	107.24
Evanston	3	114.38	109.35	125.40	102.15	106.80
Casper	4	112.31	111.87	118.24	107.97	111.36
Pinedale	5	111.38	112.34	117.79	103.28	103.51
Sheridan	6	111.23	109.09	119.63	101.89	101.95
Rock Springs	7	111.06	112.70	116.44	105.96	101.86
Riverton	8	109.77	109.36	115.26	104.90	103.76
Sundance	9	108.51	111.59	113.80	98.71	104.64
Kemmerer	10	108.20	104.07	113.56	103.69	103.19
Thermopolis	11	106.60	119.53	105.87	100.66	96.40
Buffalo	12	105.75	108.85	107.17	98.82	106.31
Greybull	13	104.24	116.20	102.13	100.54	99.72
Laramie	14	104.22	104.11	108.76	99.25	97.27
Wheatland	15	104.13	116.60	100.30	102.58	100.98
Douglas	16	103.16	106.63	101.20	103.28	105.27
Rawlins	17	102.16	108.92	102.81	101.86	93.74
Newcastle	18	101.78	106.11	101.79	96.74	107.29
Cody	19	100.52	110.12	97.43	100.21	101.89
Cheyenne	20	100.00	100.00	100.00	100.00	100.00
Worland	21	98.75	111.08	91.91	99.34	104.52
Lusk	22	96.24	107.10	85.94	98.40	99.67
Torrington	23	92.06	100.34	81.27	97.87	99.96

*Apparel and Recreation Indices not shown.

Source: Wyoming Department of Administration and Fiscal Control.

Comparison of Wyoming to the Nation and Neighboring States Per Capita Personal Income:
U.S.A., Wyoming, and Surrounding States

STATE	1976	1977	1978	1979	1980	1981
Wyoming	6,791	7,535	8,649	9,767	10,791	11,733
Colorado	6,504	7,097	8,008	9,016	10,009	11,216
Idaho	5,650	6,089	6,843	7,363	8,102	8,937
Montana	5,763	6,161	7,076	7,633	8,420	9,412
Nebraska	6,209	6,747	7,596	8,633	8,954	10,366
South Dakota	5,100	5,837	6,648	7,480	7,734	8,837
Utah	5,304	5,820	6,459	7,067	7,626	8,322
U.S.A.	6,367	6,984	7,776	8,657	9,483	10,495

Per Capita Transfer Payments:
U.S.A., Wyoming, and Surrounding States

STATE	1976	1977	1978	1979	1980	1981
Wyoming	660.01	708.54	758.17	832.62	930.88	1024.96
Colorado	783.79	840.46	883.33	963.26	1107.82	1241.24
Idaho	749.99	788.83	819.05	918.73	1088.09	1223.76
Montana	801.99	867.56	932.20	1041.14	1231.93	1400.30
Nebraska	740.18	796.08	869.63	964.04	1117.69	1279.92
South Dakota	746.66	797.41	858.57	962.62	1124.90	1290.44
Utah	662.55	704.23	752.36	815.53	931.00	1035.98
U.S.A.	892.99	946.01	1007.87	1114.40	1308.51	1466.74

State Per Capita Personal Income as a Percent of U.S. Per Capita Personal Income
Wyoming and Surrounding States

STATE	1976	1977	1978	1979	1980	1981
Wyoming	106.66	107.89	111.23	112.82	113.79	111.80
Colorado	102.15	101.62	102.98	104.15	105.55	106.87
Idaho	88.74	87.18	86.00	85.05	85.44	85.15
Montana	90.51	88.22	91.00	88.17	88.79	89.68
Nebraska	97.52	96.61	97.69	99.72	94.42	98.77
South Dakota	80.10	83.58	85.49	86.40	81.56	84.20
Utah	83.30	83.33	83.06	81.63	80.42	79.29

Personal Income by Place of Residence as a Percent of U.S.A.:
Wyoming and Surrounding States

STATE	1976	1977	1978	1979	1980	1981
Wyoming	.194	.202	.216	.227	.238	.240
Colorado	1.236	1.247	1.283	1.321	1.349	1.382
Idaho	.350	.351	.361	.353	.356	.356
Montana	.316	.310	.321	.310	.308	.310
Nebraska	.694	.683	.686	.695	.653	.679
South Dakota	.253	.262	.265	.265	.248	.252
Utah	.487	.499	.510	.515	.521	.525

Population as a Percent of U.S.A.: Wyoming and Surrounding States

STATE	1976	1977	1978	1979	1980	1981
Wyoming	.182	.187	.194	.201	.209	.215
Colorado	1.210	1.227	1.246	1.269	1.278	1.293
Idaho	.394	.402	.410	.415	.417	.418
Montana	.349	.351	.353	.351	.347	.346
Nebraska	.712	.707	.703	.697	.692	.688
South Dakota	.316	.314	.310	.307	.304	.299
Utah	.585	.599	.614	.631	.648	.662

Figure 19: Banking and Finance

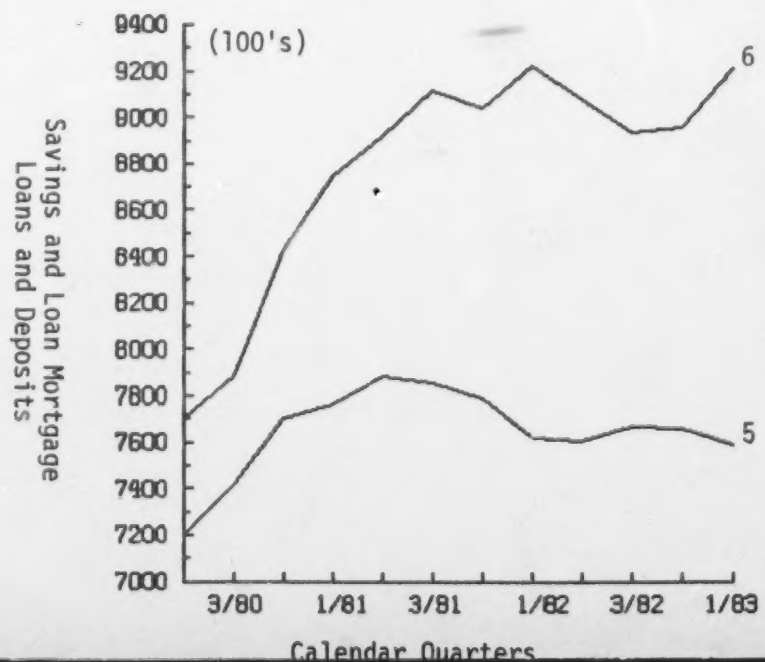
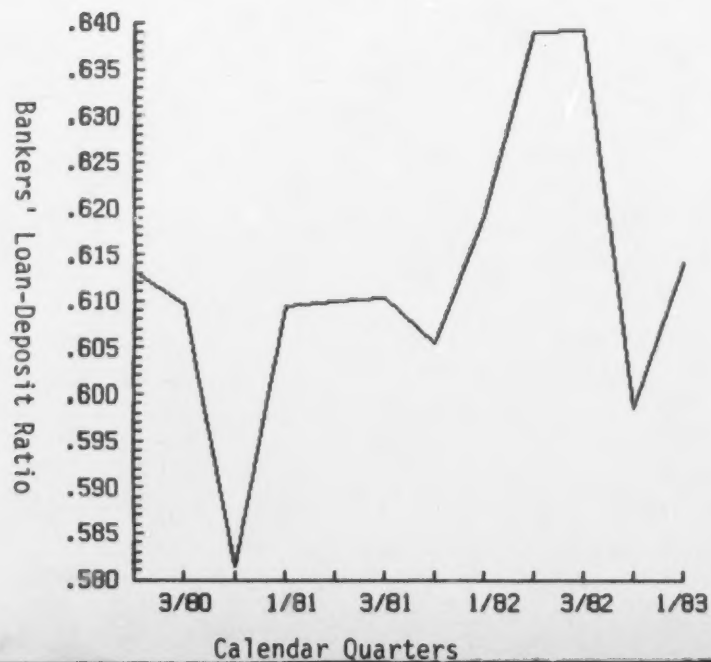
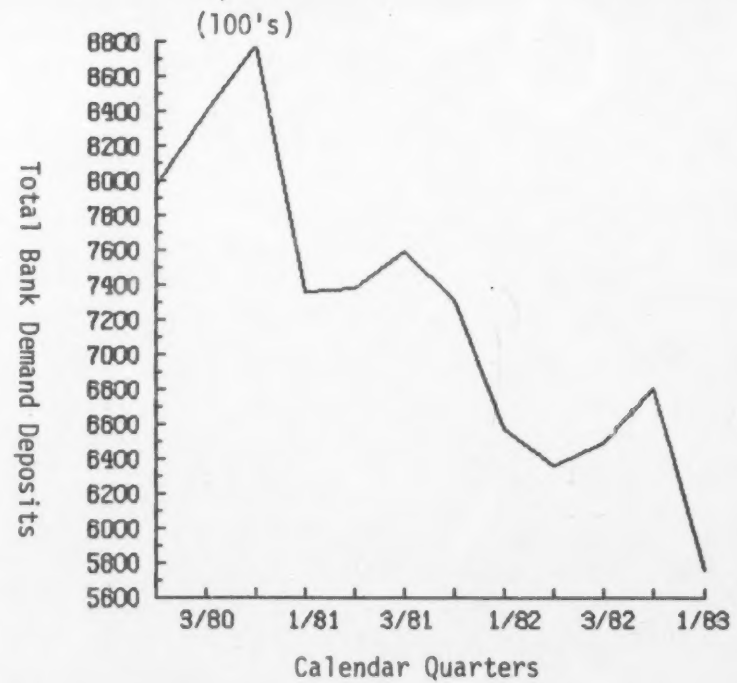
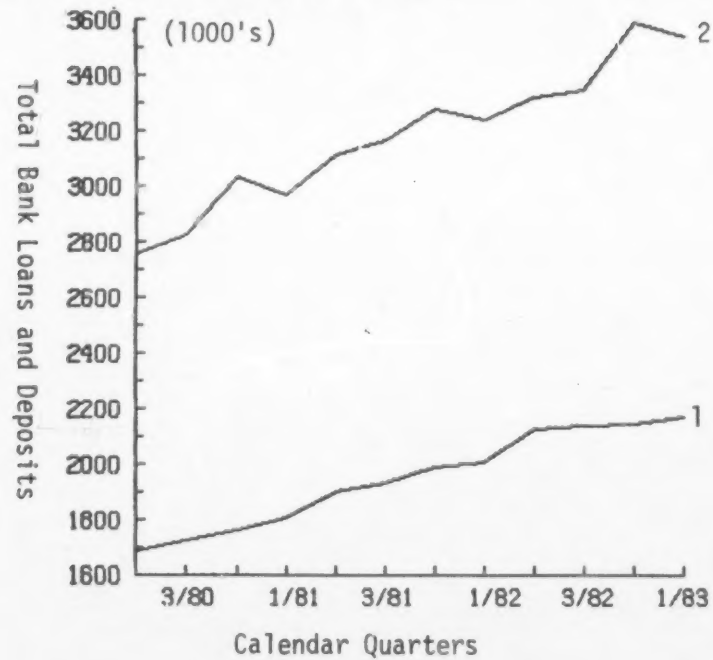


Table 17: Banking and Finance

Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
1. Total Bank Loans (T\$)	1689496.	1722916.	1764381.	1808747.	1898325.	1929706.	1984965.	2004233.	2123492.	2138495.	2147498.	2172221.
2. Total Bank Deposits (T\$)	2755238.	2826427.	3034647.	2968348.	3112270.	3161593.	3278504.	3237333.	3322621.	3345619.	3587554.	3537206.
3. Total Bank Demand Deposits (T\$)	796838.	839111.	878444.	736161.	737837.	759658.	731429.	657349.	635856.	649332.	680332.	576257.
4. Bankers' Loan-Deposit Ratio	.613	.610	.581	.609	.610	.610	.605	.619	.639	.639	.599	.614
5. Savings and Loan ¹ Mortgage Loans (T\$)	719627.	741479.	770474.	776172.	788526.	785208.	778334.	762153.	760622.	766593.	765708.	758938.
6. Savings and Loan ¹ Deposits (T\$)	770186.	788448.	842740.	874533.	891585.	911587.	904212.	921642.	907758.	893087.	895889.	921290.
7. Prime Interest Rate ²	12.7	12.2	20.3	18.0	20.0	20.0	15.8	16.2	16.2	13.5	11.8	10.5

The data seem to reflect both the slowdown in Wyoming's economy and the decline in interest rates. Bank lending during 1/83 was at its highest level ever, up 1.2 percent from 4/82 and 8.4 percent from 1/82. The rate of inflation in Wyoming between 1/82 and 1/83 was only 0.7 percent. With the recession reducing incomes and with lower interest rates curtailing the incentive to save, bank deposits fell 1.4 percent between 4/82 and 1/83, but rose 9.3 percent between 1/82 and 1/83. The 4/82 - 1/83 increase in lending was bigger than the drop in deposits. Consequently, the loan-deposit ratio rose from 59.9 to 61.4 percent.

Compared to banks, the pattern for savings and loans was somewhat in reverse. The change in deposits from 1/82 to 1/83 was virtually zero, and from 4/82 to 1/83 a 2.8 percent increase was registered. The recession's impact on mortgage lending seems to have dominated the effect of lower interest rates. During 1/83, mortgage lending was off 0.9 and 0.4 percent from 4/82 and 1/82, respectively.

The prime interest rate series and the mortgage interest rate series (Table 14) clearly demonstrate the large drop in interest rates during the preceding year. Since 1/82, the prime interest rate, the rate banks charge their best corporate customers, has fallen more than 5 percentage points, a decline of 34.1 percent.

¹Only members of the Federal Home Loan Bank Board are included.

²Rate is for the last month of the quarter.

Sources: Series 1-4: Wyoming State Bank Examiner Quarterly Report.

Series 5-6: Federal Home Loan Bank of Seattle, Monthly Report. Comparative statistical analysis of member institutions.

Series 7: US Department of Commerce, Bureau of Economic Analysis. Survey of Current Business. Published monthly.

Figure 20: Government

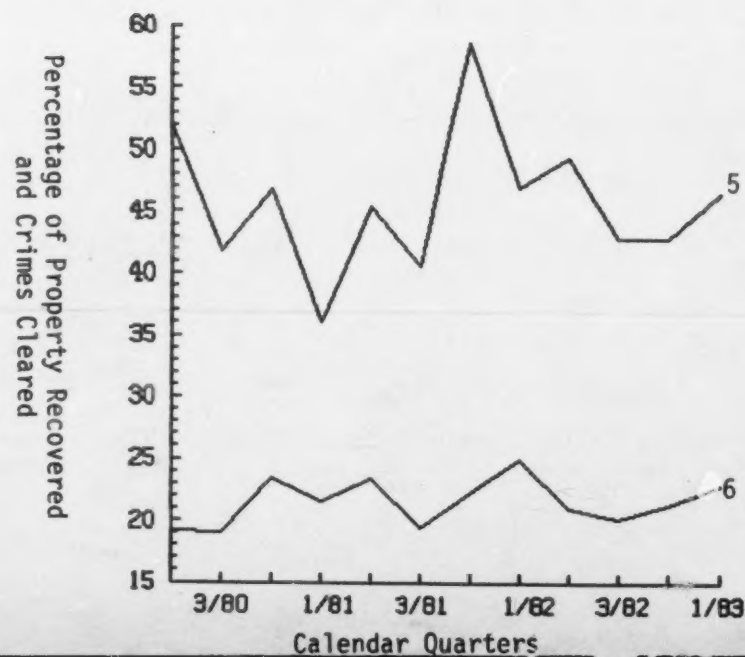
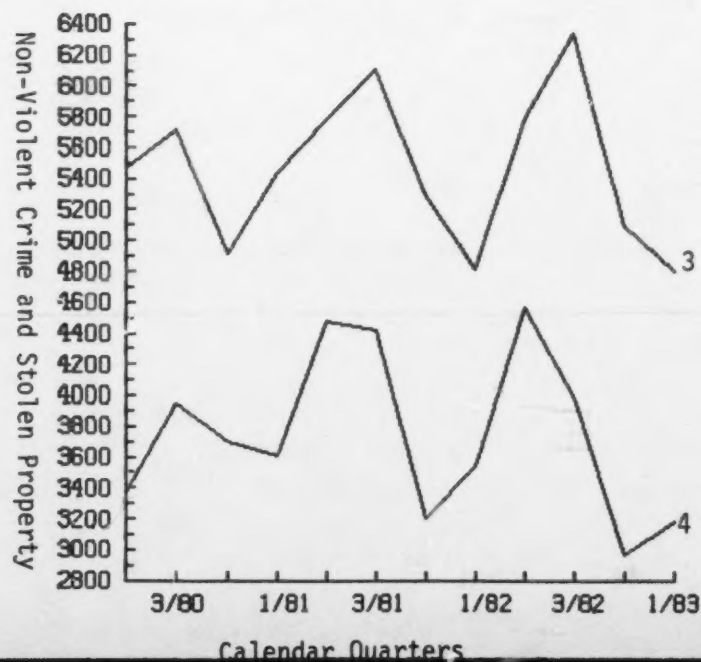
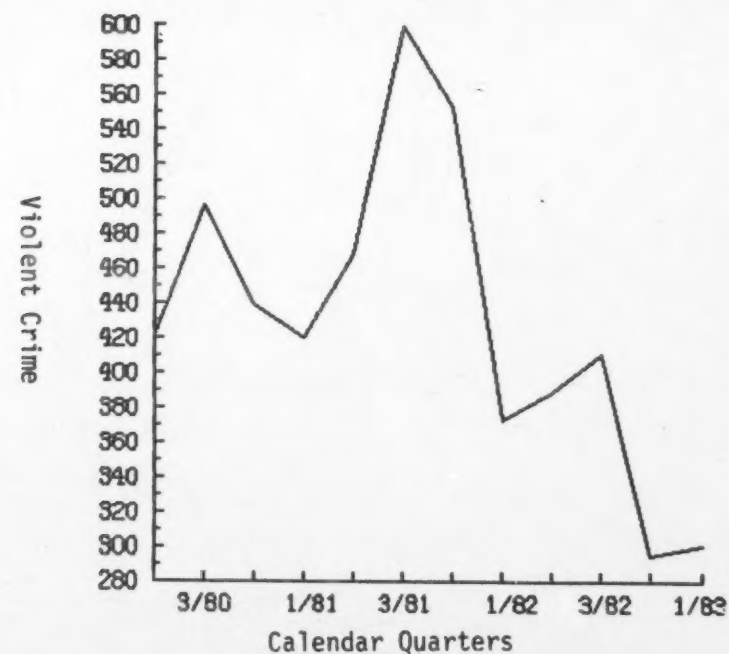
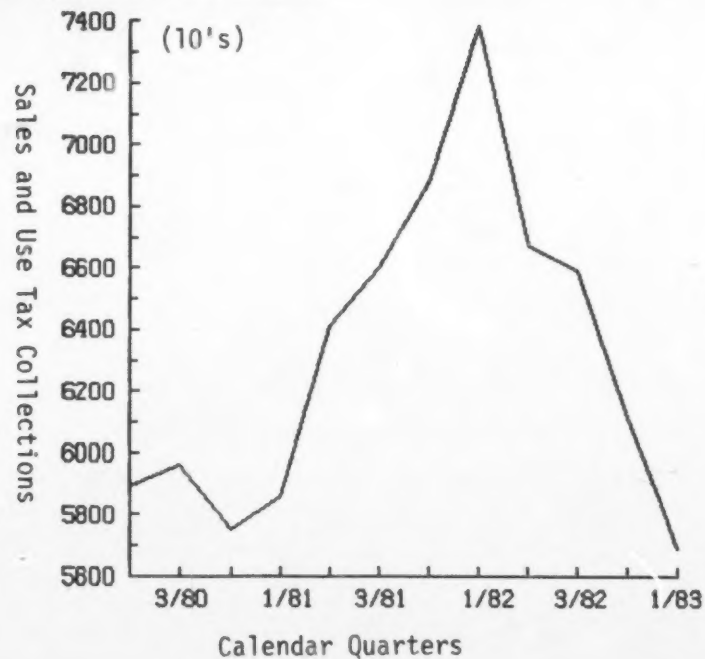


Table 18: Government

Calendar Quarters	2/80	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83
1. Sales and Use Tax Collections (M\$)	58928.	59626.	57547.	58605.	64136.	66012.	68766.	73830.	66759.	65903.	61208.	56909.
2. Violent Crime ¹	421.	496.	439.	420.	468.	599.	553.	373.	389.	411.	295.	301.
3. Nonviolent Crime ²	5464.	5710.	4916.	5430.	5783.	6111.	5299.	4811.	5778.	6346.	5093.	4802.
4. Stolen Property (T\$)	3374.	3945.	3696.	3601.	4471.	4421.	3201.	3541.	4562.	3982.	2963.	3176.
5. Stolen Property Recovery Rate	51.9	41.9	46.8	36.0	45.4	40.6	58.6	46.9	49.3	42.8	42.8	46.5
6. Percent of Crimes Cleared ³	19.1	19.0	23.4	21.6	23.4	19.5	22.3	24.9	21.0	20.1	21.3	22.8

Business and economic conditions in Wyoming are reflected by reports of state sales and tax from the Wyoming Department of Revenue and Taxation. Composite reports for 1/83 indicate that the economy of the State is still on the decline, as statewide sales and use tax collections were down 7.0 percent during 1/83 over 4/82. Collections in 1/83 are, in addition, down 22.9 below 1/82, a plunge of nearly 25 percent when Wyoming's modest rate of inflation during that period is taken into account.

The crime picture in Wyoming has brightened over the past year. A total of 5,103 offenses were reported during the first quarter of 1983, compared to 5,187 offenses during 1/82. Contributing to this drop in total reported offenses were 19.3 percent fewer violent crimes, plus a slight 0.2 percent wane in non-violent (or property) crimes.

Other crime indices remained fairly stable during the first three months of 1983. The number of offenses cleared totalled 1,163, resulting in a clearance rate of 22.8 percent. This compares to 1,287 clearances, or 24.8 percent, during 1/82. The value of property stolen in Wyoming reached \$3,176,133 compared to \$3,540,782 stolen during 1/82. Recovery of stolen property amounted to 46.5 percent during this 1983 period compared to 46.9 percent during the same period of 1982.

¹Murder, negligent homicide, forcible rape, robbery, aggravated assault.

²Burglary, larceny, auto theft.

³Clearance of a crime indicates resolution of a complaint by arrest or other extraordinary means.

Sources: Series 1: Wyoming Department of Revenue and Taxation, Sales and Use Tax Division. "Net Collections by Business Class by County." Published monthly.

Series 2-6: Uniform Crime Reporting Center for Criminal Justice Research, Division of Criminal Identification, Office of the State Attorney General. "Crime in Wyoming." Published quarterly.

Format

For data available at least quarterly, the last 12 quarters are printed in WQU. In this edition, published series begin with the 2nd quarter of 1980, and end with the 1st quarter of 1983. For other data series (primarily annual), the most recent observations, up to 12, are published in WQU. Most annual data series will reappear in WQU only when updated, or about every fourth issue. Quarters are calendar quarters. For example, the 3rd quarter is composed of July, August, and September. In the table headings and narratives, a particular quarter will be indicated by notation such as 2/80 (2nd quarter, 1980), 1/80 (1st quarter, 1980), and so on.

Beside each data series name is an abbreviation in parentheses. The abbreviation indicates the units (such as dollars, tons, feet, miles, etc.) of the data. The key to the units abbreviations is below.

Throughout WQU, all data are for the state unless otherwise stated. The most recent year's data should be viewed as preliminary, due to revisions. The acronym "INA" signifies that information is not available. Some graphics are used to illustrate trends. When more than one trend line appears on a graph, the line will be labeled with a number which matches the number of a data series on the accompanying table.

The reader should be attentive to the footnotes at the bottom of pages, particularly those accompanying a data table. The footnotes help the reader to properly interpret the data, and they also indicate when more detailed (by subject or by area) data than that which is shown is available from IPR. A list of sources follows the footnotes.

Key to Units Abbreviations

MBF - Thousand Board Feet	GL - Gallons
TKWH - Thousand Kilowatt Hours	TCF - Thousands of Cubic Feet
\$ - Dollars	KWH - Kilowatt Hours
M\$ - Millions of Dollars	TGL - Thousands of Gallons
B\$ - Billions of Dollars	HBBL - Hundreds of Barrels
T\$ - Thousands of Dollars	HMCF - Hundreds of MCF Per Day
H\$ - Hundreds of Dollars	HST - Hundreds of Short Tons
ST - Short Tons	\$/ST - Dollars per Short Ton
TST - Thousands of Short Tons	
MCFD - Million Cubic Feet Per Day	
TBPD - Thousands of Barrels Per Day	

RECENTLY PUBLISHED WYOMING RELATED RESEARCH REPORTS

THE WYOMING ECONOMY: HISTORICAL TRENDS AND PROJECTIONS
by Shelby Gerking and John Merrifield
Available now

No Charge

ANALYSIS OF THE LONG-TERM IMPACTS AND BENEFITS OF GRAND TETON
NATIONAL PARK ON THE ECONOMY OF TETON COUNTY, WYOMING
by John Merrifield and Shelby Gerking
Available now

\$5.00*

EXPORTATION OF STATE AND LOCAL TAXES: A COMPARATIVE ANALYSIS
by Shelby Gerking, William Morgan and John Mutti
Available now

\$5.00*

A STUDY OF EMPLOYER PREFERRED SKILLS AMONG GRADUATING BUSINESS
STUDENTS OF THE UNIVERSITY OF WYOMING
by Gary Benson
Available now

No Charge

CHANGING FEDERAL-STATE RELATIONS IN WATER RESOURCE PLANNING:
THE CASE OF WYOMING
by R. McGregor Cawley and Charles Davis
Available now

*Prices reflect reproduction costs only.

HOW TO ORDER

Please mail your order together with payment (if necessary) to:

INSTITUTE FOR POLICY RESEARCH

Box 3925, University Station

Laramie, WY 82071

ATTN: Beth Daniels

Thank You

10/27/83

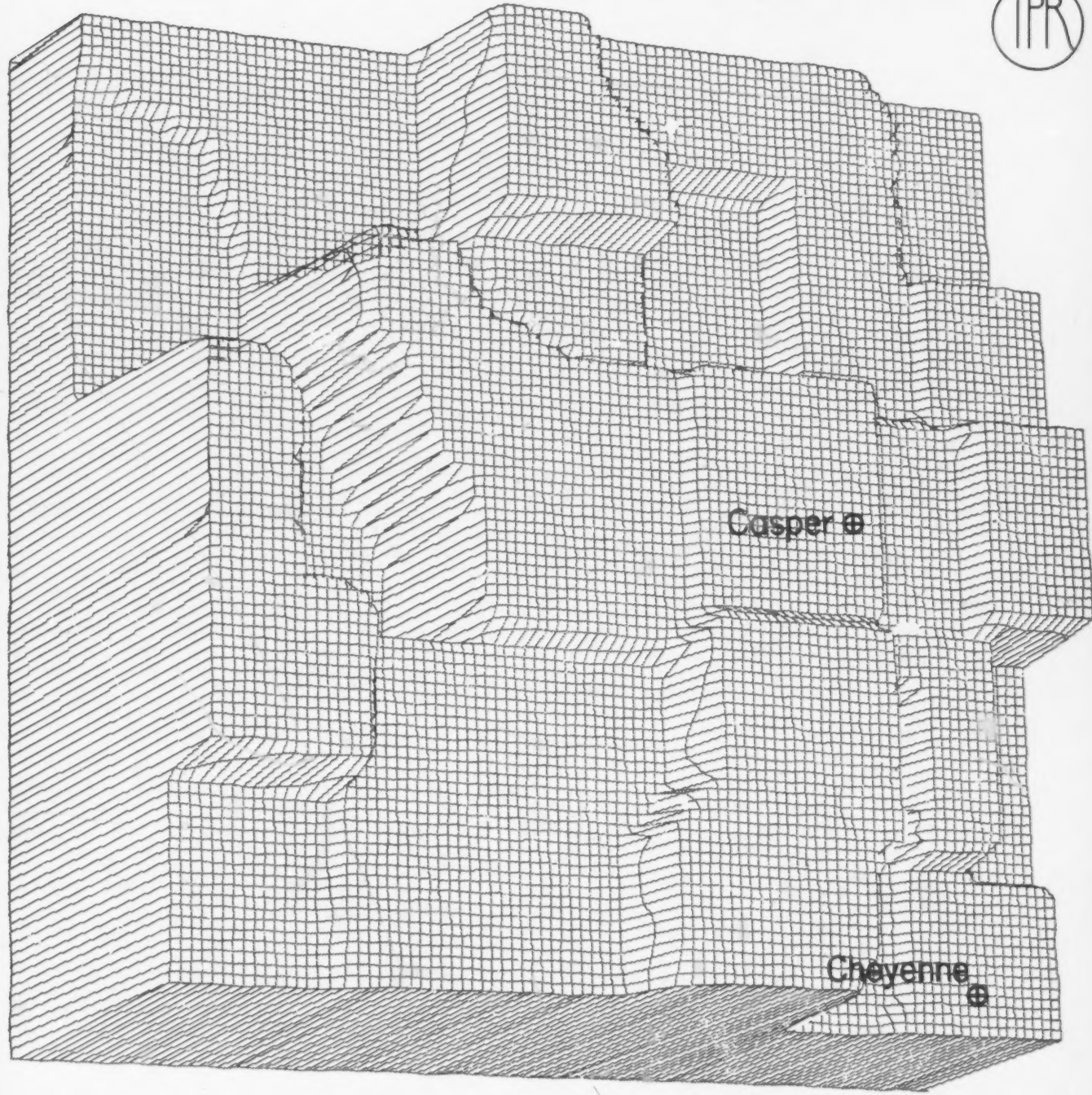
U 9350-2

A

Fall 1983

Vol. 3, No. 1

Wyoming Quarterly Update



July 1983 County Unemployment Rates

Wyoming Quarterly Update

Wyoming Quarterly Update (WQU) represents the efforts of the Institute for Policy Research (IPR) at the University of Wyoming to provide improved data access services. The data presented in WQU are assembled from secondary sources, such as government agencies and private industry. The staff of IPR greatly appreciates the ongoing cheerful cooperation of each of the data sources listed in the bibliography.

WQU provides current indicators and timely, easily accessible data. Most of the data published in WQU are updated quarterly with the most current numbers. The complete data sets from which WQU originates are maintained, together with documentation by IPR. Readers are encouraged to contact IPR to find out how to gain access to data which does not appear in the WQU. Many data series, such as gasoline sales and taxation data, span more than 30 years. Numerous other series cover 20 years or more.

Efforts to expand the subject and geographic detail (county data) of data sets will be made continuously. Featured for the seventh time in this edition are county profiles. Current data and discussions are presented for Sheridan, Campbell, Crook, and Weston counties. In the winter edition, Albany and Carbon counties will be featured.

The cover of each edition features a contour map illustrating the geographic distribution of a particular variable. This edition presents a contour map of county unemployment rates in Wyoming for July 1983.

First-time readers of WQU should refer to the "format" explanations on page 53 for keys on how best to use and interpret data presented in this publication.

For additional information, contact WQU editor S.T. Mast at:

The Institute for Policy Research
University Station, Box 3925
Laramie, WY 82071
(307) 766-5141

OTHER IPR SERVICES AND RESEARCH REPORTS ARE LISTED ON THE LAST PAGE OF THIS WQU.



INSTITUTE FOR POLICY RESEARCH
OFFICE OF RESEARCH AND GRADUATE STUDIES
UNIVERSITY OF WYOMING



FRONT MATTER

Introduction.....	i
Table of Contents.....	ii

WYOMING SCENE

Overview and Perspective.....	2
Minerals Outlook.....	4
Agricultural Outlook.....	8
Job Openings Outlook.....	9
Oil Perspective.....	10

COUNTY PROFILES

Sheridan County.....	14
Campbell County.....	21
Crook County.....	28
Weston County.....	35

ECONOMIC CHANGES

Discussion.....	42
-----------------	----

WYOMING DATA

Agriculture.....	44
Banking and Finance.....	45
Business Conditions.....	45
Construction.....	46
Consumers.....	46
Employment and Labor.....	47
Energy and Mineral Production.....	47
Government.....	48
Tourism.....	48
Utilities.....	49
Wyoming Cost of Living Index.....	50
Other.....	51

END MATTER

Format Description.....	52
Recent Research Reports.....	53
CRIS Information.....	54

Editor.....	S.T. Mast
Editorial Advisors.....	G. Fred Doll
	Shelby Gerking
Word Processing.....	Nancy Fallas
Editorial Assistance.....	Beth Daniels
Research Aide.....	Ruth Tebbutt
Graphics.....	UW Graphic Arts Services
	Computer Graphics Package

Wyoming Quarterly Update is published four times per year in fall, winter, spring, and summer editions.

The articles appearing in this publication represent the opinions of the authors and do not necessarily reflect the views of the state of Wyoming or the University of Wyoming or their respective executive officers. Duplication or quotation of material in this publication is welcomed, but it is requested that WQU, the Institute of Policy Research, University of Wyoming, be credited.

**WYOMING
SCENE**

Overview and Perspective

After roaring ahead during the second quarter, the national economic recovery has slowed in recent weeks, responding to higher interest rates that some analysts fear might retard the upsurge. Others, however, welcome the slowed pace, hoping the moderation will continue the economy on a steady, noninflationary growth path.

The recovery gained along a broad front during the second quarter. Bolstered by a dramatic \$78-billion increase in consumer spending, the gross national product (GNP) rose \$102 billion during the second quarter to a seasonally adjusted annual rate of \$3,274 billion. On a percentage basis, GNP rose at an annual rate of 8.7 percent during the second quarter, compared to a rise of 2.6 percent during the first quarter, according to the Commerce Department.

Inventory liquidations continued as a response to higher-than-expected demand. Final demand (GNP minus change in business inventories) rose by 5.5 percent--up from a meager gain of 0.6 percent posted during the first quarter.

After declining for five quarters, business investments rose \$3 billion during the second quarter--not a substantial amount in real terms, but a significant indication nonetheless in view of continuing low manufacturing utilization rates and the high costs of long-term capital.

New orders continued to climb, especially in hardgoods manufacturers. Hardgoods manufacturers climbed 5.5 percent in June, culminating an eight-month rise that wiped out all the declines experienced during the recession.

Business productivity rose 6.1 percent at an annual rate during the second quarter, the fastest rate in nearly eight years. Corporate profits climbed 20.6 percent, the largest quarterly increase since the third quarter of 1975.

Employment news was also good during the second quarter. The unemployment rate fell from 10 percent in June to 9.5 percent in July, and the decline since the end of 1982 was faster than during any of the preceding four recoveries.

A survey released in September, conducted by Dun & Bradstreet, indicated that projected employment increases would total between 3 and 3.2 million in 1983, up from the 2.5 million projected by the firm in January. (However, the survey estimated that unemployment would probably remain near 9 percent for the rest of the year.)

Retail sales climbed at an annual rate of 25 percent during the second quarter, another indication that consumer spending--coupled with the invigorating effects created by lower interest rates--powered the initial recovery phase.

By mid-summer, however, the recovery had lost some of its initial steam. Interest rates began creeping upward. VA and FHA graduated payment mortgage rates reached 13.75 percent in July, while level payment rates reached 13.5 percent. Sales of new homes declined 6 percent in July. Domestic auto sales dropped to an annual rate of 6.6 million units in August, down from 7.2 million in July and 7.5 million in June. July's unemployment rate of 9.5 percent remained unchanged during August. Also in July, the Commerce Department's index of leading indicators rose a scant 0.3 percent; however, analysts interpreted the small increase as a slower-growth phase of the recovery rather than as a downturn.

And overall, the national economic outlook does remain positive. No new inflationary trend has materialized. August auto sales were down 9.2 percent, but more as a result of temporary shortages created by high summer demand than from consumer retrenchment.

Economists, moreover, apparently still have faith in the underlying strength of the recovery. A recent survey, conducted by the National Association of Business Economists, of 250 forecasters indicated that most felt the recovery would continue smoothly through the 1984 presidential election. However, unless Congress comes to grips with the federal deficit (\$179.8 billion through July) the recovery thereafter could be seriously impeded. The forecasters generally were concerned that large government borrowing would conflict with private borrowing, thus driving up the interest rates.

The outlook with respect to interest rates has improved in recent weeks. The growth in money supply has leveled off, alleviating some of the pressure on interest rates. In August, VA and FHA level payment mortgage rates declined to 13 percent and graduated payment mortgage rates declined to 13.25 percent. Commenting on the decreases in rates, Housing and Urban Development Secretary Samuel Pierce, Jr. said the slowdown in money supply growth, moderation in retail sales, and fewer durable goods orders had reassured the credit market that the recovery would not rekindle inflation.

In the intermediate-term, a Business Week outlook with respect to interest rates suggests that rates could drop another 1.5 percentage points by the first quarter of 1984, but then begin rising again as the Federal Reserve

responds to the inability of Congress to cut the federal deficit.

In Wyoming, the unemployment rate dropped to 9.4 percent in July, down from the 9.6 rate registered in June and slightly less than the July U.S. employment rate of 9.5 percent. The size of the state's labor force was up 10,000 persons from July of 1982. However, the number of persons with jobs remained nearly unchanged from July 1982 to July 1983, indicating that many new members of the labor force apparently were unemployed. Carbon (12.8 percent), Lincoln (12.7 percent), and Natrona (11.9 percent) counties registered the highest levels of unemployment in July. In total numbers, 23,400 person were unemployed statewide.

The minerals industries of Wyoming remain in the doldrums. However, one positive sign has been an increase in the number of rotary drilling rigs active in the state, generally increasing throughout the summer and reaching a total of 113 by September. After a slow start, tourism rebounded well in Wyoming during July and August, according to Wyoming Travel Commission spokesman Ernie Over. Over says the slow start may have been related to the general state of the economy and to adverse publicity connected with the flooding in Colorado and Utah. But, he says, visitor counts increased steadily during July and August and final counts should be very close to last year's totals.

S.T. Mast, IPR

#

#

Fall Minerals Outlook

OVERVIEW

The fall quarter marked the first encouraging sign of a possible upturn in the state's mineral industry. Even as the summer issue of the Quarterly Update came off the press, oil and gas drilling activity had begun a long awaited increase. By early September, the rig count in Wyoming had actually exceed 1982 levels for the first time this year. Although the number of rigs was nowhere near the peak counts of 1980-81, it is nearly twice the count in May of this year. Obviously, this increase in activity will not have an immediate effect on declining income and revenues, but without some new drilling, the future would look very gloomy indeed.

Unfortunately, just as the rig count increased, the effects of a nationwide natural gas glut (the "gas bubble") were again brought home. In August, a major gas contract in the Powder River Basin was cancelled by Colorado Interstate Gas Company (CIG). This cancellation affected about 2 percent of the state's gas production at a time when 20 percent of the state's gas wells are already shut-in.

Although the supplier and producers have sued CIG over the matter, the cancellation prompted numerous operators to seek permission to flare casinghead gas (gas produced along with oil production). An estimated 26 million cubic feet of gas per day was suddenly without a buyer. Emergency flaring orders were issued by the Oil and Gas Conservation Commission (O&GCC) which limited the flaring to about 13 million cubic feet per day. In dollars, the flared gas amounted to about \$40,000 per day. Without the flaring order, some 8,200 barrels of oil per day would be shut in at a value of almost \$240,000 per day.

In mid-September, the O&GCC issued an order whereby CIG was ordered to take 70 percent of the shut-off casinghead gas in the Powder River Basin and cut back their takes of gas-well gas to 48 percent. This order followed the temporary suspension of an emergency rule which set guidelines for purchasers to follow if they were cutting back on gas takes. In effect, the rule would require purchasers to cut back takes of gas from gas wells before reducing takes of casinghead gas.

CIG had challenged the commission's authority to issue such a rule, but was apparently complying with the later order as the Fall Quarterly Update went to press. Hopefully, the order will solve the immediate problem and restore at least 70 percent of the oil and gas production affected by CIG's cancelled contract.

The outlook for Wyoming's other mineral industries was little changed in the fall quarter, nor was it expected to improve much in the last quarter. Coal production looked very much like it would fall short of the previous year's production of 108 million tons - something that hasn't happened in 17 years. Equally important, coal prices were reportedly still falling.

The uranium industry foundered more, and trona, gypsum, iron ore, and limestone are still expected to do little more than hold their own. With renewed drilling activity, the outlook for bentonite improved slightly.

As an indication of the recessionary effects on Wyoming, Governor Herschler had to call a special session of the legislature to seek more funds for unemployment compensation. In addition, lagging sales tax and mineral tax revenues prompted the governor to order a 4 percent cut in all agency budgets. Budgets for the next biennium do not include any pay increases and are expected to show no growth over the present funding levels.

*Gary B. Glass, State Geologist,
Wyoming Geological Survey*

COAL UPDATE

The transportation of coal out of Wyoming continues to be a major factor in the future of Wyoming's coal industry. The existence of competition for coal transportation out of the Powder River Basin was demonstrated recently when Arkansas Power and Light Company (AP&L) awarded a long-term (20 years with a 15-year renewal option) coal delivery contract to a joint venture between the Chicago and North Western (C&NW) and Union Pacific railroads. Competition for this contract came from Burlington Northern (the only company transporting coal out of the Powder River Basin) and Energy Transportation Systems, Inc. (ETSI), the coal slurry pipeline company. The contract calls for shipment of 10 million tons of coal per year from Peabody's North Antelope Mine (under construction) and Kerr-McGee's Jacob's Ranch Mine to AP&L generating plants. The utility claims that competition for this haulage contract resulted in a savings to consumers of about \$16.5 billion in transportation costs through the year 2016.

The loss of AP&L as a potential ETSI customer has forced the company to look elsewhere (especially Texas) for customers. ETSI is still planning construction of the \$3.8 billion coal slurry pipeline but will have to reroute the pipeline from its present position to the market(s) they secure. Evidently, several Texas utility companies now served by Burlington Northern Railroad are interested in possible transportation alternatives.

The award of AP&L's new contract to the C&NW and Union Pacific railroads follows this July's start of construction on their new 107-mile long, \$445-million railroad line in eastern Wyoming and the Nebraska panhandle.

The rail line is expected to be completed in late 1984 and should be operating in 1985.

Markets for Wyoming coal continue to be newsworthy. Although many long-term contracts have been signed for coal deliveries to electric utilities, the large quantities of inexpensive coal available on the marketplace is even having an effect on these contracts. This has resulted in renegotiation of contracts (at lower coal prices as controlled by the market conditions), sudden cancellation of contracts, and reduction of coal shipments to either the minimum allowed by the contract or to less than the minimum (resulting in deferred deliveries). For example, an Oklahoma utility has been renegotiating its contract with Carter Mining Company for new prices on coal from the Rawhide Mine under a reopener clause (which allows for renegotiation of the contract with changing market conditions) in their current contract.

On a more negative note, Peter Kiewit Sons, which operates the Big Horn Mine in the northwest Powder River Basin, was recently cut back 400,000 tons of coal under their contract with Commonwealth Edison. Evidently, this Illinois utility company has an oversupply of coal and could face penalties from an Illinois regulatory agency for having excessive stockpiles of coal. In July, Big Horn Coal Company laid off 20 employees, probably permanently.

Southern Wyoming coal mines continue to have difficulties. At Bridger Coal Company, despite the rehiring of 12 laid-off employees and the hiring of five additional supervisory positions, and despite the mine going back to a 5-day production schedule, it is still expected that production at this mine will remain 10 percent below normal for the rest of the year. The Jim Bridger generating plant supplied by Bridger Coal Company has operated at less than half its capacity during the year and has also been plagued by large coal stockpiles. In the Hanna Basin, the late July announcement by Carbon County Coal Company that they would be hiring as many as 25 workers at their underground mine was offset by news in late August that Omaha Public Power District has cancelled a 450,000-tons-per-year coal contract with Rosebud Coal Sales because of excess coal stockpiles at their generating plants in Nebraska. This tonnage represents about half of Rosebud's annual production.

On the positive side, competition for new coal contracts in existing markets and in new markets appears to be heating up between traditional coal suppliers and the newer Powder River Basin coal companies. Kansas City Power and Light Company's contract with Arco for over 2 million tons of coal per year expires at the end of this year; three coal companies that have Powder River Basin mines, in addition to Arco, are in the running for a new 20-year contract. Mobil Coal recently signed a contract with the Grand River Dam Authority in Oklahoma for 1986 coal deliveries to new generating units currently under construction; Carter Mining Company currently supplies the

existing units at the plant. At least nine companies are competing for a contract to supply coal to a new generating plant operated by Southwestern Public Service; two companies with Powder River Basin mines are listed among the finalists, while Arco, the current supplier of 6 million tons of coal per year to the utility, is not.

A Minnesota utility is looking to Powder River Basin coal companies for 2.8 million tons of coal per year for their recently announced Sherco Unit 3 generating plant and a Florida-based utility company has invited over 100 coal companies, including many western subbituminous producers, to bid on a coal supply contract for new generating units at Crystal River Station. Wyoming coal producers have been unsuccessful in the Minnesota electric utility market, which is dominated by Montana coal. Although some Wyoming coal is used in Minnesota for residential/commercial heating, none is currently being used in generating plants. The current low coal prices and the competition for coal contracts will hopefully increase the amount of Wyoming coal used in Minnesota. The Florida market for Wyoming coal has been mentioned by Wyoming coal companies as a possible market in the past, but until now, Wyoming coal has not been competitive. If western coal were used at Crystal River Station (on the west side of the Florida peninsula), it would be transported by rail to St. Louis, barged down the Mississippi River to New Orleans, and then shipped across the Gulf of Mexico to Crystal River Station. Delivered cost of the coal is expected to be about equal for western coal and for low-sulfur eastern coal from the Appalachians. The higher transportation costs for western coal would be offset by an FOB mine price much lower than that for eastern low-sulfur coal.

On the federal coal-leasing scene, the Bureau of Land Management (BLM) recently released a draft Environmental Impact Statement (EIS) for round two of leasing in the Green River - Hams Fork region, tentatively scheduled for the summer of 1984. The draft EIS recommends a high leasing alternative of 759.3 million tons of recoverable coal in 19 tracts, 11 in Wyoming and eight in Colorado. The release of this EIS evidently reflects the Department of the Interior's decision to go ahead with their planned leasing activities despite congressional resolutions proposing suspension of funds to continue the leasing effort. The U.S. Department of the Interior recently announced that a coal lease sale for Fort Union tracts in Montana and North Dakota would go ahead as scheduled this September, despite a resolution passed by the House Interior Committee forbidding the sale.

Richard W. Jones, Staff Coal Geologist, Wyoming Geological Survey

OIL AND GAS UPDATE

Things appear to be looking up for the state's oil and gas industry. After a low of 58 active rigs in May of this year, the total

jumped to 113 in early September. Much of this increased activity is centered in the Powder River Basin and reflects an increased interest in oil, as well as falling drilling costs. Gas exploration continues on the downswing due to the current gas surplus.

Woods Petroleum recently announced that a major new oil field (Powell field) will come into production this fall in the Powder River Basin. Peak yearly production is estimated at 3.6 million barrels, a total that would nearly offset the natural production decline the state has been experiencing during the last few years. A unit agreement was recently approved by the Wyoming Oil and Gas Conservation Commission, thus making production possible.

Davis Oil Co. recently announced the discovery of a huge new oil field in the Powder River Basin. The field is believed to be the largest discovered since 1970 in the basin, with estimated total production between 100 million and 200 million barrels of oil equivalent. The field is located in the Powder River Basin, about 15 miles west of Gillette. Davis Oil Co. indicated it will drill as many as 30 additional wells in the field, along with the one-year, 100-140 well-drilling program announced earlier for the Powder River Basin. The producing formation in the field is the Lower Cretaceous Muddy Sandstone.

Alan J. Ver Ploeg, Staff Petroleum Geologist, Wyoming Geological Survey

URANIUM AND INDUSTRIAL MINERALS UPDATE

Uranium

Hearings were held in Riverton August 29 and in Casper August 30 regarding the status of the uranium industry. Governor Ed Herchler submitted testimony calling for restrictions on foreign uranium imports. Independent uranium companies also called for the easing of "unnecessary regulations," after which domestic uranium may become competitive with foreign uranium. Hearings in Riverton were for Senator Alan Simpson's information; those in Casper were for the U.S. Department of Energy's proposed methods of assessing the viability of the domestic uranium industry. Wyoming produced 20 percent of the nation's uranium in 1982 (2,700 tons U_3O_8).

Uranium exploration continued at a slow pace, with only 13 exploration drills reportedly operating in July in the state, including those used for annual claim assessment work.

The spot market price of uranium increased from \$23.75 to \$24.00 per pound at the end of August, up from \$23.25 at the end of the preceding quarter.

Wyoming currently has only six active uranium-mining operations.

Trona

Wyoming's soda ash production this June was the same as in June 1982. With the trend toward plastic bottles instead of glass, and the failure of the domestic soda ash industry to establish export markets in countries using foreign Frasch Process soda ash, the future of Wyoming's trona industry apparently will not show any significant increase in production or employment. Allied Chemical, however, did rehire 23 employees previously laid off, although their current work force of about 870 is down from past levels of about 1,200.

Bentonite

Bentonite production continued at levels similar to those of 1982. With the economic recovery underway, bentonite production will increase with increases in taconite mining (for which bentonite is used in producing iron from taconite) foundry castings, and petroleum exploration.

Gypsum

Gypsum production in Wyoming should increase in the last half of 1983 as housing starts increase, requiring more gypsum for wallboard.

Limestone

Limestone production should increase slightly in the last half of 1983 as its use in cement and industrial aggregates increases. However, lower sugar production could offset any increase in total limestone production. Several companies explored for limestone and dolomite in Wyoming this summer.

Others

Nontaxable aggregate production increased in the third quarter of 1983 as highway construction reached its annual peak.

The U.S. Bureau of Mines has successfully tested concrete made from sulfur, produced in Wyoming as a by-product from oil and gas production. Sulfur concrete has advantages over ordinary concrete due to its resistance to acids and corrosion. Its use is expected to increase as commercial production of sulfur concrete begins.

There has been some industry interest this summer in natural zeolites. The ion-exchange capacities of zeolites make them valuable for use in water softeners, in uranium (and other metal) milling and refining, and in agriculture.

Ray E. Harris, Staff Geologist, Wyoming Geological Survey

METAL AND PRECIOUS STONES UPDATE

Although activities for metals and precious stones in Wyoming appeared to be at low levels, recent copper price increases and

stabilization of gold and silver prices, should cause a moderate increase in activity.

Reported activity for strategic metals exploration included Exxon Minerals exploration of the historic Ferris Haggarty copper mine area in the Sierra Madre. Exxon is conducting exploration to determine available copper reserves in case the copper market makes significant improvements in the near future.

Nearby, in the Fletcher Park area (to the south of Exxon), Timberline Minerals staked a large region for massive sulfides (zinc-copper-lead-silver).

The Bradley Peak area of the Seminoe Mountains remained the focal point of exploration for gold by Kerr-McGee and Timberline Minerals. The Bradley Peak mineralized area was discovered by Wyoming Geological Survey geologists in 1981. The discovery led to Wyoming's first major gold rush in over fifty years. Timberline Minerals is conducting detailed mapping studies, as well as exploration drilling, to determine the extent of the gold occurrences. The gold is reportedly in veins and in an exhalite, as well as lesser amounts in gabbros, amphibolites, and iron formation.

Other gold activity was reported at South Pass and at Oregon Buttes. At South Pass, some limited underground activity has been reported at the Carrisa, Mary Ellen, and St. Louis mines; several small placer operations were winding down for the upcoming winter. At Oregon Buttes, Searle Brothers Construction Company is reportedly preparing for some limited exploration of dry gold placers.

An additional amount of gold may have been unknowingly produced by some sand and gravel operators in the state. Because of its potential occurrence in many sand and gravel deposits, Rocky Mountain Energy Company (a subsidiary of Union Pacific Railroad), has advised many of its leaseholders that they set up gold extraction units to process sand and gravel in order to recover gold as a by-product. Several operators in Wyoming could benefit from such a secondary recovery system. In particular, sand and gravel operations in historic gold placer districts may be ignoring a valuable resource.

At Copper Mountain, north of Shoshoni, the Wyoming Geological Survey currently is investigating the geology and related mineral deposits. Of particular interest is the historic DePass copper-gold-silver mine. This property was developed by more than 11,000 feet of underground workings and appears to still host large metal resources. U.S. Borax and Timberline Minerals are conducting exploration in the Copper Mountain region.

Cominco American Incorporated formed a joint venture with Chevron Minerals to again resume exploration for diamond-bearing kimberlite in the Laramie Range of Wyoming. The Geological Survey of Wyoming also continued with their efforts to locate and outline diamond deposits in the southern Laramie Range. In addition, some exploration for diamond deposits was reported in the Medicine Bow Mountains.

*W. Dan Hausel, Deputy Director,
Wyoming Geological Survey*

#

#

Fall Agricultural Outlook

The current agricultural outlook is dominated by the drought in the Midwest. The USDA crop report released September 12 projected the U.S. corn crop at 4.39 billion bushels, a dramatic 48 percent decline from last year's record crop and 16 percent less than last month's estimate.

The worst drought of this century will prove to be a double-edged price sword for most livestock producers. The reduced feed and forage supplies will increase production costs for all producers of red meat and poultry products. In the short run, prices producers receive for their product have declined dramatically, as increased supplies of beef and pork increase due to herd liquidation in response to higher cost.

LIVESTOCK SITUATION

Even prior to the hot dry weather that occurred in late July and August throughout much of the nation, it was difficult to build much optimism into the outlook for calf and yearling prices for the fall of 1983. A sluggish U.S. economy and increasing supplies of pork and poultry will dampen demand even without the herd liquidation that is certain to occur because of the drought. A number of cows will be sent to market as forage supplies in the midwestern and southern states are dried up.

The sharp rise in corn and soybean meal prices will accelerate an anticipated liquidation in the pork sector. Each 10-cent-per-bushel increase in corn prices adds about 60 cents per cwt to the cost of producing hogs; and a \$10-per-ton increase in soybean meal adds about 30 cents per cwt. Drought aided price increases in corn and soybean prices since September 1982 would raise hog production costs by around \$9.00 per cwt. Substantial feeding losses this fall will probably bring a significant cutback in breeding stock this fall.

Mature sheep slaughter for the first half of 1983 totaled 221,000 head compared with 206,000 last year, an increase of 7 percent. Some of the increase in slaughter is coming from producers who are cutting back on their

operations or getting totally out of the sheep business. The current drought in the Midwest and certain portions of Texas also has contributed to the increased ewe slaughter.

PROSPECTS

The hot dry weather that occurred throughout much of the U.S. this past summer will have both short-term and long-term impacts on Wyoming's livestock industry.

Prices for all classes of livestock will be lower this fall than were anticipated as recently as late July. High feed grain prices will force more animals to slaughter, and the increased supplies will result in prices below profit-making levels in the beef and pork sectors.

The cattle industry had already begun a slight liquidation the past two years due to low prices, and the events of 1983 will speed up this process. Thus, beef supplies are likely to be smaller in 1984 and 1985. The hog sector was also anticipating some reductions this fall, and with the high grain prices, heavy supplies of pork will be on the market throughout the remainder of the year.

Price prospects for calves and yearlings this fall will be 5 percent to 10 percent lower than fall 1982, but somewhat above the lows of early September. Despite the poor feed grain crop, the grain-stocks-to-estimated-utilization rates will still be higher than existed in the 1973-76 period. Steer/calf prices should average \$64-\$66/cwt during the October-November period, with yearling prices in the \$58-\$62/cwt range.

Livestock prices should rebound in the latter half of 1984 as supplies of red meat are reduced. Producers who have ample forage should strongly consider overwintering calves and grazing them on grass in 1984. Barring another grain shortfall in 1984, livestock prices should be 12 percent to 18 percent higher in the fall of 1984.

Food price increases, which will average about 3 percent in 1983, will likely inflate to 6 percent - 7 percent in the latter half of 1984 as a result of this summer's drought. Beef, pork, and poultry products should prove to be good buys at the supermarket throughout the remainder of 1983.

Robert D. Carver, University of Wyoming

#

#

Job Openings Outlook

There is a slight shortage of qualified bakers in Wyoming. The demand for bakers is not only steady but is expected to grow faster than average for all occupations. Even in a poor economy, people continue to eat bread, not to mention rolls, donuts, and other baked goods. The outlook for bakers depends on the replacement of those who leave the occupation, automation, the number of convenience stores with in-store bakeries, and government regulations. Experienced bakers are in demand; however, most bakeries will hire and train on the job. Employment opportunities are better in large grocery stores and chains than in small privately owned shops. Employment for bakers is steadier than for most food processing occupations because there is little seasonal variation. Baking is a craft that has a very low turnover rate and a large number of bakers retire from the same shops in which they were trained.

Bakers enjoy a higher salary than most people in the food processing industry. Non-union entry wage is approximately \$3.50 per hour. Non-union wages with experience range from \$6.00 - \$7.00 per hour. Union apprenticeship wages range from \$4.00 - \$6.80 per hour. Union journeymen wages range from \$8.00 - \$9.70 per hour. Very few Wyoming bakers belong to the Bakery and Confectionary Workers Union, although some join the grocery union.

Most bakers learn the trade through informal on-the-job training, although an apprenticeship program is available. The length of training will vary with the specific skill, from a few days to several years. Bakers must be at least 18-years-old and have good health.

There is a balance to slight shortage of qualified radio and TV service technicians in Wyoming. The job outlook is dependent upon technological advances, consumer demand for electrical and electronic equipment, availability of training programs, and the

level of oil and mining activity. Technological advances in this field are continuous and therefore opportunities are better for technicians who can adapt to the changing technology. Employers report that due to the arrival of microprocessor-controlled radios, TV's, and test equipment, individuals with digital computer background will fare best in the job market. Another factor influencing demand is that such technological advances have produced more reliable products, often reducing the amount of repair work needed. Because this field is changing so rapidly some employers report that training programs have been unable to keep current in "hi tech" electronics (digital techniques and computerization).

Radio and TV service technicians install and repair electrical and electronic equipment such as radios, TV's, stereo components, tape recorders, home computers, and video equipment. They identify problems by using service manuals and testing equipment (such as voltmeters), replace parts, fix connections, and make adjustments. The skills required for radio and TV service technicians are expanding to include skills previously reserved for fields such as computer repair.

Radio technicians who work with FM 2-way radio and communication systems must have a Radio Telephone Operator's License obtained from the Federal Communications Commission (FCC). This license must be renewed every five years. For more information on licensing contact:

Federal Communications Commission
Field Operations Bureau
12477 West Cedar Drive
Denver, Colorado 80228
(303) 234-6979

The outlook for FCC licensed radio technicians is especially favorable due to the specialized electrical nature of the work. Entry level wages for technicians range from \$800 - \$1,200 per month. Experienced technicians earn between \$1,200 - \$1,800 per month. Some are paid an hourly wage plus commission. On the other hand, beginning wages for licensed radio technicians range from \$1,300 - \$1,735 per month, while maximum wages range from \$1,900 - \$2,500 per month.

*Karen Scott, Wyoming Career
Information Service*

#

#

An outlook for Wyoming production

Oil Perspective

The search for new oil is risky and uncertain. Exploration for new reserves is always a gamble, despite the best seismic data and the latest in drilling technology. Dry holes are the most common finds. During 1981, for example, 79.8 percent of the exploratory wells drilled in Wyoming for oil and gas resulted in dry holes.

At the same time, total state production in recent years has declined, at an annual rate of 2 percent to 3 percent each year. Production in Wyoming's major oil-producing counties (with the exception of Uinta county) has either dropped or leveled out.

One reason for the decline is the age of Wyoming's major oil fields. Of the top ten producing oil fields in Wyoming, the average age per field is 50.6 years (based on 1981 production). The largest field, the Oregon Basin in Park County, was discovered in 1912; the second largest, the Salt Creek field in Natrona County, was discovered in 1889.

The decline in production has been a matter of more than passing concern. In 1981, the assessed value of crude oil production in Wyoming was \$3,610,096,154; oil and gas production accounted for 78.4 percent of the total assessed value of all minerals produced. The revenues generated from oil and gas production help support a variety of governmental programs, including public schools, highways, the state general fund, and the state permanent fund. Very simply, and without increases in gas and oil prices, decreasing production means decreasing revenues.

The decline in oil production experienced in recent years could be halted in two ways. The first is simply to find new oil; the second is to squeeze more oil from existing fields. Both seem to be in Wyoming's oil future.

In the near-term, Alan Ver Ploeg, staff oil and gas geologist for the Wyoming Geological Survey, says that major new discoveries in the Powder River Basin alone could halt the natural declines experienced in recent years associated with Wyoming's older fields. For instance, some experts suggest that the Amos Draw field complex near Gillette by itself has the

potential of producing in excess of 100 million barrels of oil and billions of cubic feet of natural gas.

Recent increases in drilling activity are centered in the Powder River Basin, principally an oil basin. With oil surpluses experienced earlier in the year drying up; and with higher oil prices a possibility, drilling interest is presently concentrated on oil, according to Ver Ploeg. In addition, drilling costs have dropped considerably, adding further incentive for exploration. Ver Ploeg estimates that 70 percent of the recent increase in drilling activity is centered in the Powder River Basin.

Ver Ploeg is optimistic about oil and gas production as it relates to state revenues. "I don't see oil production going down that much," he says. "I think they'll (oil companies) really zero in on it and hit it hard. With gas, I don't see production jumping exponentially like it did, but I don't see a tremendous decline like some see," despite current gas surpluses. With respect to oil, Ver Ploeg says there is a "reasonable chance" production will level out until there is zero decline.

Don Basko, state oil and gas supervisor, agrees. Basko says the downward trend in production should level out soon, at least for a time. He based his assessment on the fact that the Powell unit in Converse County would soon begin producing 10,000 barrels of oil per day; in addition, Overthrust Belt activities will also contribute new production to the overall total. At present price levels for oil and gas, Basko says he doesn't foresee any big fluctuations in state revenues generated by oil and gas production in the near future.

Rick Robitaille, executive director of the Petroleum Association of Wyoming, also believes that in the near-term the potential exists for new discoveries to offset the declines associated with the old fields.

"It will depend a lot on economic conditions," he says. But with favorable economic circumstances, Robitaille says, "conditions are favorable for maintaining fairly constant and stable production."

In the out-years of this century, however, the picture could be more complex. Oil is, after all, a finite commodity. The existence of more Amos Draws or Overthrust Belts is problematic; perhaps such fields lie undiscovered, perhaps not.

As a result, efforts are being expended to squeeze as much oil as possible from already discovered fields. And in all likelihood, such efforts will increase over time.

As a general rule of thumb, says R.E. Terry, associate professor of petroleum engineering at the University of Wyoming, only 40 percent to 50 percent of the original oil in the ground is recoverable at all, no matter what kinds of current technology are applied. About a third of the oil can be recovered through primary and secondary recovery techniques (pumping and waterflooding, for example); an additional one-twelfth to one-sixth of the oil in the ground can be recovered through often exotic and costly tertiary methods.

During primary recovery operations, the energy of the oil-bearing formation (the natural reservoir pressures employed in pumping, for example) is used to produce oil. During secondary recovery, the energy of the formation is supplemented by either water or gas to move the oil to a recovery well.

During secondary recovery, the water or gas added to the formation does not actually mix with the oil. Tertiary or third-stage techniques, on the other hand, employ agents that often actually interact with the oil. Others techniques employ combustion or heat to achieve the same objective. Polymers are added in order to thicken water so that the water will do a more efficient job pushing oil to recovery wells. In other processes using micellar surfactants or caustic agents, detergents are formed that wash the oil off underlying rocks. The miscible gas processes form intermediate components such as propane or butane in order to move the oil more effectively. Cases such as nitrogen and carbon dioxide mix directly with the oil remaining in the ground. Other techniques employ combustion or heat to achieve the same objective.

In Wyoming, a variety of tertiary techniques have been employed, including thermal processes, detergent processes, and miscible gas processes.

The use of tertiary techniques is governed by oil economics and by the nature of site geology.

"The problem we have right now is that in order for some of these (micellar and polymer) processes to be economical people are talking about oil that sells anywhere from \$35 to \$45 per barrel," Terry says (the current price is \$29 per barrel). Terry notes that the price could be less for some processes such as nitrogen miscible and carbon dioxide with a source of gas readily at hand.

In western Wyoming, where high concentrations of carbon dioxide have been associated with natural gas wells in the Big Piney-LaBarge area, there has been some interest in piping CO₂ to the Big Horn Basin for use in some of Wyoming's older fields, according to Ver Floeg. In addition, nitrogen miscible techniques have been employed in the Painter Reservoir of Uinta County.

For a time, as reported in the September 1980 edition of the Western Oil Reporter, there was some speculation that a CO₂ pipeline from supply areas in eastcentral Utah to the Powder River Basin could be feasibly constructed. One unnamed Shell engineer estimated that a large enough line would enable Powder River Basin operators to produce tertiary oil using CO₂ for \$15 to \$20 per barrel, assuming enough participation in the project to allow high utilization of the pipeline. Alkaline flooding, using Wyoming soda ash as the caustic agent, also has been discussed, though its applicability seems limited.

At present, relatively few tertiary

WYOMING'S TEN LARGEST CRUDE OIL FIELDS (Based on 1981 Production)

Field	County	Year Discovered	1981 Production (bbls.)	Total Cumulative Production (bbls.)
Oregon Basin	Park	1912	10,347,416	321,607,017
Salt Creek	Natrona	1889	5,617,540	587,304,642
Painter Reservoir	Uinta	1977	4,759,724	9,766,952
Little Buffalo Basin	Hot Springs	1914	4,517,662	92,964,582
Brady	Sweetwater	1973	3,908,948	32,659,428
Lost Soldier	Sweetwater	1916	3,754,071	189,928,090
Elk Basin	Park	1915	3,648,905	409,737,910
Hartzog Draw	Campbell	1976	3,474,174	32,707,056
Grass Creek	Hot Springs	1914	3,471,050	166,736,752
Hamilton Dome	Hot Springs	1918	3,201,464	208,172,228

Total 1981 Production - Ten largest fields 46,700,954 bbls.

Percentage of total 1981 state oil production 38.2 percent

Average age of top ten oil fields 50.6 years

Source: Wyoming Oil and Gas Conservation Commission

TERTIARY PROJECTS IN WYOMING

FIELD OR UNIT	COUNTY	TYPE OF PROJECT	INJECTORS		YEAR	OPERATOR
			ACTIVE	(INACTIVE)		
Big Muddy	Converse	Surfactant	9	(1)	1979	Conoco, Inc.
Big Piney Area	Sublette	Water/Polymer	3	(0)	1980	Belco, Petroleum Corp.
Byron	Big Horn	Water/Polymer			1982	Marathon Oil Co.
Cyclone Canyon	Crook	Water/Polymer	3	(8)	1974	Planet Associates, Inc.
Dillinger Ranch	Campbell	Carbon Dioxide, Miscible Flood	0	(2)	1980	Tenneco Oil Company
Kuehne Ranch	Campbell	Water/Polymer	2	(0)	1981	Samedan Oil Corporation
LaBarge	Sublette	Water/Surfactant	Project		1975	Texaco, Inc.
Moorcroft	Crook	Water/Polymer	6	(3)	1974	Planet Associates, Inc.
Painter Reservoir	Uinta	Nitrogen Miscible	11	(0)	1981	Chevron, U.S.A., Inc.
Red Springs	Hot Springs	Water/Steam	0	(5)	1976	Coronado Oil Co.
Saddle Ridge	Sublette	Water/Polymer	10	(3)	1981	Belco Petroleum Corp.
Salt Creek	Natrona	Water/Micellar	4	(0)	1972	Amoco Production Company
Sharp	Campbell	Chemical Flood	--	--	1981	Anderson Oil Company
Thornton	Weston	Inert Gas/Pilot	--	--	1982	Diamond B. Industries
Tip Top	Sublette	Water/Polymer	5	(0)	1981	Belco Petroleum Corp.
Tisdale North	Johnson	Water/Thermal	7	(4)	1963	Conoco, Inc.
Todd	Weston	Water/Polymer		(8)	1981	HPC, Inc.
Torchlight	Big Horn	Water/Micellar	4	(0)	1976	Amoco Production Company
Unnamed	Crook	Thermal Flood	--	--	1981	Kirkwood Oil & Gas

Source: Wyoming Oil and Gas Conservation Commission.

projects are active in Wyoming. Data published in 1982 by the Wyoming Oil and Gas Conservation Commission listed 64 active tertiary projects in the state. Some suggest that tertiary projects are active as much to capture tax advantages as oil, noting that Windfall Profit Tax liability for such projects is reduced from 70 percent to 30 percent.

"Absolutely not true," says Robitaille. First, the companies operating such projects must do so profitably, says Robitaille, and not merely to take advantage of a tax incentive. Thus, production potential is the primary concern. And while noting the tax advantage provided due to the risk and cost involved in such projects is a help, he points out that tertiary production is still subject to various other taxes, including state severance tax and county ad valorem taxes.

In terms of production potential, Robitaille maintains that "tertiary projects have the potential for producing tremendous amounts of crude oil." Indeed, Robitaille says under favorable economic conditions, tertiary projects could help boost reserves to a fairly

constant state for the period of the next 30-40 years.

Observing that only two wells in a hundred find commercially producing fields (at an average drilling cost of \$1 million per hole for both dry and producing wells), Robitaille notes that one major advantage of tertiary recovery is that the oil has already been discovered. The problem then becomes getting the remaining oil out of the ground, often a very risky and expensive business.

Nevertheless, says Robitaille, the writing's on the wall for tertiary: "We're anxiously watching to see what develops in third-stage recovery," he says.

It appears, then, that the recent declines in overall state oil production should level off in the near-term, and given favorable economic conditions, the outlook could be for fairly constant rates of production for some time to come.

S.T. Mast, IPR

#

#

COUNTY PROFILES

Sheridan County Profile

PHYSICAL CHARACTERISTICS AND CLIMATE

Sheridan County is located in the northcentral part of Wyoming. It is bordered to the north by the state of Montana, to the south by Johnson County (Wyoming), to the east by Campbell County, and to the west by Big Horn County. Sheridan, the county seat, is located on the northwestern edge of the Powder River Basin, at the confluence of Little Goose Creek and Big Goose Creek.

Sheridan County comprises a land area of 2,532 square miles, or 1,620,480 acres, seventeenth largest county in Wyoming. Of the total acreage, 488,616 acres are owned by the federal government, 109,678 acres are owned by state and local governments, and 1,021,546 acres are privately owned.

The western portion of the county encompasses portions of the Big Horn Mountains, while the eastern portion is located within the Powder River Basin. The basin areas are characterized by high ridges and divides, capped by sandstone and red clinker (oxidized coal), and numerous small streams. The Big Horn Mountains rise steeply from the valley floor.

Elevations within the county range from 3,745 ft. at Sheridan to over 10,000 ft. in the Big Horn Mountains. The county is drained by the Little Bighorn River, the Tongue River, and the Powder River, all parts of the Yellowstone River system.

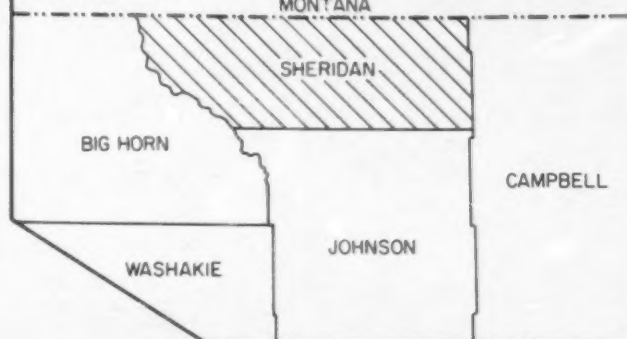
Climatically, the basin areas can be classified as semi-arid, while the mountainous zones receive substantially more precipitation. Average annual precipitation at Sheridan is 15.89". Annual average snowfall for the county is 67.8"; however, the snow usually is low in moisture content and does not remain long in the basin areas due to downslope airflows from the mountains to the west.

The growing season in Sheridan County averages about 131 days. The average date of the last freeze is May 21, while the average date of the first freeze is September 21. The annual mean temperature for the county is 45.2°F. January temperatures average 10°F near the mountains and 22°F in the eastern portions of the county, while July temperatures average 54°F in the mountains and 70°F in the eastern basin areas.

HISTORY

During late prehistoric times, the Crow tribe is believed to have separated from the Hidatsa tribe in what is now western North Dakota. From there, the Crow gradually migrated into the Northern Great Plains, adopting a nomadic, hunting way-of-life.

Map I: Location Map of Sheridan County, Wyoming.



Joseph Medicine Crow, a native American ethnologist, believes the Crow tribe settled in what is now southcentral Montana by about 1600 A.D. What little archeological evidence exists suggests the Crow arrived in the Big Horn Mountains of Wyoming by at least 1600 A.D., possibly earlier. Radiocarbon dating of pottery materials found at the Big Goose Creek site (located 10 miles west of Sheridan) suggests the Crow may have been present as early as 1310 A.D. and probably no later than 1500 A.D.

The present-day Crow reservation is located in southcentral Montana, across the border from Sheridan County.

Before the coming of white men to the area, Sheridan County was a favored hunting domain for various Indian tribes. Many wars were waged for control of the plentiful bison, pronghorn, elk, and deer. In the end, the Sioux prevailed, after a long struggle with the Crow.

After 1810, white fur trappers and explorers began making their way into the area. Father John Pierre DeSmet is credited with discovering Lake DeSmet in 1851 in what is now Johnson County. The opening of the Bozeman Trail through Sheridan County in 1864 resulted in many disputes with the Indians. One of the first military confrontations occurred in 1865 near the present town of Ranchester when P.E. Connor's troops fought Cheyenne and Arapahoe warriors in the "Battle of Tongue River." Thereafter, Fort Phil Kearney was established along Piney Creek south of Sheridan to protect travelers along the Bozeman Trail.

In 1866, the famous Fetterman Massacre took place close to Fort Phil Kearney near the present town of Banner. Fighting subsided for a time in the area after troops under the command of Major James Powell, using rapid-firing Springfield rifles for the first time, defeated Red Cloud's Sioux warriors in the "Wagon Box Fight."

Table 1: Sheridan County Profile

Calendar Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1. Births	258.	255.	259.	235.	286.	270.	350.	390.	441.	449.	455.	497. ¹
2. Deaths	233.	261.	247.	254.	246.	236.	233.	241.	214.	216.	210.	239. ¹
3. Divorces	131.	113.	154.	142.	120.	148.	155.	140.	202.	202.	209.	187. ¹
4. Marriages ²	320.	352.	360.	338.	383.	406.	377.	338.	352.	408.	402.	382.
5. Population	17900.	18300.	18900.	19200.	20100.	21200.	21800.	22900.	24200.	25048.	26000.	27054. ³
6. Coal Production (HST)	INA	9738.	4641.	10231.	8052.	7478.	23623.	28600.	35366.	43276.	27364.	30027.
7. Valuation on Coal Production (H\$)	INA	21216.	8379.	39552.	48588.	58570.	295287.	391271.	551711.	662122.	544545.	627427. ³
8. Oil Production (HEBL)	INA	3655.	2694.	2106.	1639.	1643.	1879.	2117.	1878.	2052.	1695.	2310. ³
9. Valuation on Oil Production (H\$)	INA	11197.	9610.	10992.	8827.	9639.	13234.	17527.	18746.	31347.	58732.	72798. ³
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
10. AFDC Recipients	INA	1345.	1513.	1663.	1612.	1603.	1616.	1403.	1217.	1499.	1765.	1560.
11. Food Stamp Recipients	557.	848.	831.	766.	796.	660.	541.	406.	441.	860.	990.	862.
12. AFDC Payments	INA	198614.	236680.	271694.	252289.	281660.	301600.	253144.	253329.	358400.	448368.	460705.
Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83
13. Hotel, Motel, & Camp Sales & Use Tax Collections (\$)	44413.	23314.	16305.	26929.	50513.	25271.	15906.	22064.	43952.	15548.	10194.	19807.
14. Total Sales & Use Tax Collections (\$)	1948930.	1675011.	1639031.	1775568.	1774509.	1646109.	1881367.	1841341.	2031075.	1880361.	1880719.	1792353.
15. Liquor Sales (\$)	496931.	623195.	353039.	449498.	480452.	612664.	378411.	478945.	508393.	579357.	406160.	443047. ⁴
16. Gasoline Gallonage (GL)	4609811.	4021755.	3032146.	3739801.	4460538.	3132996.	2523798.	4149554.	5257356.	4062859.	3182671.	3630000.
17. Civilian Labor Force	10897.	10778.	10977.	11498.	11600.	11100.	11315.	11973.	12123.	12077.	11856.	12751.
18. Employment	10486.	10223.	10281.	10717.	11173.	10622.	10476.	11273.	11417.	11052.	10531.	11642.
19. Unemployment	411.	555.	696.	780.	426.	479.	839.	700.	706.	1025.	1325.	1109.
20. Unemployment Rate	3.8	5.1	6.3	6.8	3.7	4.3	7.4	5.8	5.8	8.5	11.2	8.7

¹Provisional data from the Wyoming Department of Public Health, Division of Vital Statistics.²1971 through 1979 and 1981 are estimates made by the U.S. Bureau of the Census, not an actual count as in 1980. 1982 is an estimate made by the Department of Administration and Fiscal Control.³Provided by the Sheridan County Assessor.⁴Estimate Based on trend and data for the first two months of the quarter.

Sources: Series 1-4: Wyoming Department of Public Health, Division of Vital Statistics. "Vital Statistics." Published yearly.

Series 5: Regional Economics Information System, Bureau of Economic Analysis. Population data included in table of "Personal Income by Major Sources."

Series 6-9: Annual Report: Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal year report.

Series 10-12: Wyoming Division of Public Assistance and Social Services. Management Information and Statistical Report. Published biannually.

Series 13: Sales and Use Tax Summary by County. Hotel, Motel, and Camp Sales Tax Collections. Wyoming Department of Revenue, Sales and Tax Division. Published monthly.

Series 14: Net Collections by Business Class by County. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.

Series 15: Sales by County-City. Wyoming State Liquor Commission. Published monthly.

Series 16: The Gasoline Gallonage Report. Petroleum Association of Wyoming. Gasoline consumption by county. Published monthly.

Series 17-20: Employment Security Commission of Wyoming. Labor Force Trends. Published quarterly.

After gold was discovered in the Black Hills in 1874, however, fighting was renewed. After the annihilation of Gen. George Armstrong Custer at the Little Bighorn, attempts were made to force the Sioux on government reservations. In November 1876, Dull Knife was defeated west of present-day Kaycee in Johnson County, marking the final major defeat of the Sioux in Wyoming.

Between 1876 and 1886, large herds of cattle were driven through Sheridan County toward Montana. Many ranches established headquarters in Sheridan County and began haying operations. In 1886, however, a severe drought decimated many cattle herds, pointing up a need for more supplemental feed supplies to prevent such catastrophies. As a result, irrigation projects were expanded.

Homesteaders and sheepmen also were entering the area during this period. Tensions gradually increased between the numerous small operations and the large cattlemen, prompting the large cattlemen to form an independent army comprised of Wyoming Cattlemen's Association members. The "army" invaded Johnson County in April 1892, bent on hanging or otherwise driving out their enemies. The invaders were met by locals south of Buffalo and a gunfight resulted, before the U.S. Cavalry could intervene. The so-called "Johnson County War" in some respects marked the end of an era for the cattle barons; for the most part, only those ranches that were well managed would thereafter survive, and the claims of the small operators had finally become permanently established.

Towns began springing up throughout the area. In 1881, Big Horn was established along the Bozeman Trail, the first town in Sheridan County. John D. Loucks organized the town of Sheridan along Goose Creek in 1882. Not to be outdone by other communities, Loucks offered free town lots to local cowboys. And when in 1888 Sheridan County was created with the town of Sheridan as its county seat, the bulk of the ranch supply trade gradually shifted in favor of Sheridan. Both the town and county were named for Phillip H. Sheridan, Loucks' commanding officer during the Civil War.

The coming of the Chicago, Burlington, and Quincy Railroad (CB&Q) in 1892 spawned much development in Sheridan County. Coal mining became an important economic activity. Numerous mines and small mining communities sprang up between 1900 and 1920, including Monarch, Kooi, Dietz, Acme, and Carneyville (Kleenburn). Between 1900 and 1910, the population of Sheridan County tripled, from 5,122 to 16,324, as miners, farmers, and merchants flocked to the area. The town of Sheridan alone increased in population during the period from 1,559 to 8,408.

Small industries followed the influx. A flour mill was constructed in 1903 and a brewery in 1907. These were soon followed by an iron foundry, several creameries, a beef packing plant, a brick-and-clay tile works, and a sugar factory. Intensive grain farming

became established to supply the flour mill, as did several dairy farms to supply the dairy industries.

With the dawn of the automobile age, highway location became an important concern for Sheridan County businessmen interested in the lucrative tourist trade. In 1914, the Black and Yellow Trail was constructed to transport travelers from Minnesota through the Black Hills, on to Buffalo, Tensleep, Cody, and finally to Yellowstone National Park. Since the route by-passed Sheridan, local businessmen began promoting Custer Battlefield Highway, which led to Glacier National Park via Sheridan.

Highway construction was again at the center of intense regional competition when in 1958 the siting of Interstate 90 was under consideration. Ultimately, the highway was routed from Gillette to Buffalo; but despite fears that the decision would have disastrous consequences for Sheridan County tourism, the industry continued to thrive and grow.

Sheridan County tourism received an additional assist this summer with completion of U.S. Highway 14A between Sheridan and Lovell--heretofore a narrow, treacherous route local people say many tourists feared to tread.

The fortunes of coal have ebbed and flowed in Sheridan County. At first, coal served the needs of the railroad; then World War I spurred production even further. Between 1920-1935, coal was mined principally for domestic use and for the railroad, and high production levels continued through World War II. With the end of the war, and with the advent of the diesel electric engine for railroad use, however, production was restricted mostly to local consumption. Then, during the 1970's, new markets for coal developed, especially for use in electric-generating power plants. Perhaps the most notable operation in the area is Peter Kiewit & Son's Decker, Montana, mine. Located directly across the border in Montana, the impact of the mine nevertheless has fallen mostly upon Sheridan County, where most of the workers live. Two operating coal mines are located in Sheridan County--the Big Horn Mine and the Ash Creek Mine.

NATURAL RESOURCES

Minerals

Coal production accounted for over 90 percent of Sheridan County's assessed minerals valuation in 1981--a total of \$60,716,671. The entire 1981 coal production of 2,736,400 tons was from Peter Kiewit & Son's Big Horn Strip Mine north of Sheridan. This production represents a 1,591,200-ton decline in net taxable production from 1980. According to Department of Economic Planning and Development (DEPAD) projections, however, production at the Big Horn Mine is expected to stabilize at between 3 million and 3.5 million tons annually by 1985.

In 1982, Big Horn coal production was augmented by Ash Creek Mining's P.S.O. Mine #1.

But even though 1982 county production increased over 1981 county production by 8.87 percent (to 3,002,677 tons), the Ash Creek Mine contributed only 836 tons to the increase.

Dale Hoffman, DEPAD minerals division analyst, reports that no major fluctuations are expected in Sheridan County's coal production in the near future since the mines are operating with long-term contracts. However, as reported in the coal update of this publication, the Big Horn Mine in Sheridan County recently did cut back 400,000 tons of coal under their contract with Commonwealth Edison; in July, 20 employees were laid off.

Another mine, the Spring Creek Mine, is expected to have a substantial impact on Sheridan County when and if production begins. Although the mine will be located in Montana, 93 percent of the employees are expected to live in Sheridan County. When fully operational, some estimates suggest the mine would have 305 permanent employees.

Oil was first discovered in Sheridan County at the Ash Creek field in 1952. In 1954, the Ash Creek South field was opened. Both fields are still producing and represent the bulk of county oil production. In 1981, Shell Oil's Ash Creek South field was the largest producing field in the county, accounting for 33.08 percent of the county's total production of 169,494 barrels. Mobil Oil's Ash Creek field was the second largest producer, accounting for 31.16 percent of the county's total production.

In 1982, county oil production rose to 231,030 barrels, thanks mostly to a new discovery by Davis Oil Company which was recently combined with the Fence Creek field. The new field produced 76,044 barrels of oil in 1982, surpassing both Ash Creek field (48,022 barrels) and Ash Creek South (53,315 barrels) production levels for that year.

Production projections made by DEPAD suggest a decline in Sheridan County oil production over the near-term. However, such projections are somewhat in doubt when one considers the increase in production during 1982. In addition, Gulf Oil has announced plans for a major exploration project west of Story. Gulf has proposed to drill a 15,000 ft., \$6 million exploration well in hopes of discovering reserves that could produce anywhere from 25 million to 100 million barrels of oil--rivaling some of the finds in western Wyoming's Overthrust Belt. If the project proceeds--and if a major reserve is discovered--projections of declining production may need alteration.

Natural gas production declined from 32,639 mcf in 1981 to 22,004 mcf in 1982; the valuation on 1981 production was \$77,380, falling to \$57,290 in 1982. Moose Draw (J&B Producing Co.) was Sheridan County's only producing natural gas field during 1981-82.

Scoria, sand, and gravel also are mined in Sheridan County, with a 1982 assessed valuation of \$253,082. Other mineral occurrences include

asbestos, bentonite, copper, gold, and gypsum, although no major recovery operations for these minerals are active.

Water

The Tongue River and its numerous tributaries are the main sources of surfacewater in Sheridan County. The Tongue River, along with the Powder River, is an interstate tributary of the Yellowstone River and is therefore subject to the terms of Yellowstone River Compact.

Under the terms of the Yellowstone River Compact, 40 percent, or 96,400 acre-feet, of the unused or unappropriated water in the Tongue River is annually allocated to Wyoming. In addition, because the compact recognizes water rights prior to 1950, earlier water rights are allocated a supplemental water supply from the unused or unappropriated waters of the Tongue River and the Powder River that averages approximately an additional 74,000 acre-feet per year.

Although the Tongue River and the Powder River normally have unused or unappropriated water available for division, no compact water is available during drought years.

Existing reservoirs are all located in the Big Horn Mountains. The largest is Big Goose Park Reservoir, with a capacity of approximately 11,000 acre-feet. However, a prefeasibility study prepared for the Governor's Interdepartmental Water Conference indicates additional water storage for both industry and agriculture could be provided throughout the Tongue River and the Little Bighorn River basins. For example, the previously proposed Sheridan Canal Project--together with additional water storage in the Big Horn Mountains--could provide as much as 9,200 acre-feet in supplemental water supplies along Little Tongue Creek, Wolf Creek, Soldier Creek, and Big Goose Creek.

Shallow groundwater wells in the Fort Union Formation and the Wasatch Formation, together with unconfined water supplies from quaternary deposits associated with streams, provide adequate water for livestock and domestic use. However, large quantities of water for industrial use are available only in a few deep formations, potentially the Bighorn Dolomite, the Madison Limestone, the Amsden Formation, and the Tensleep Sandstone.

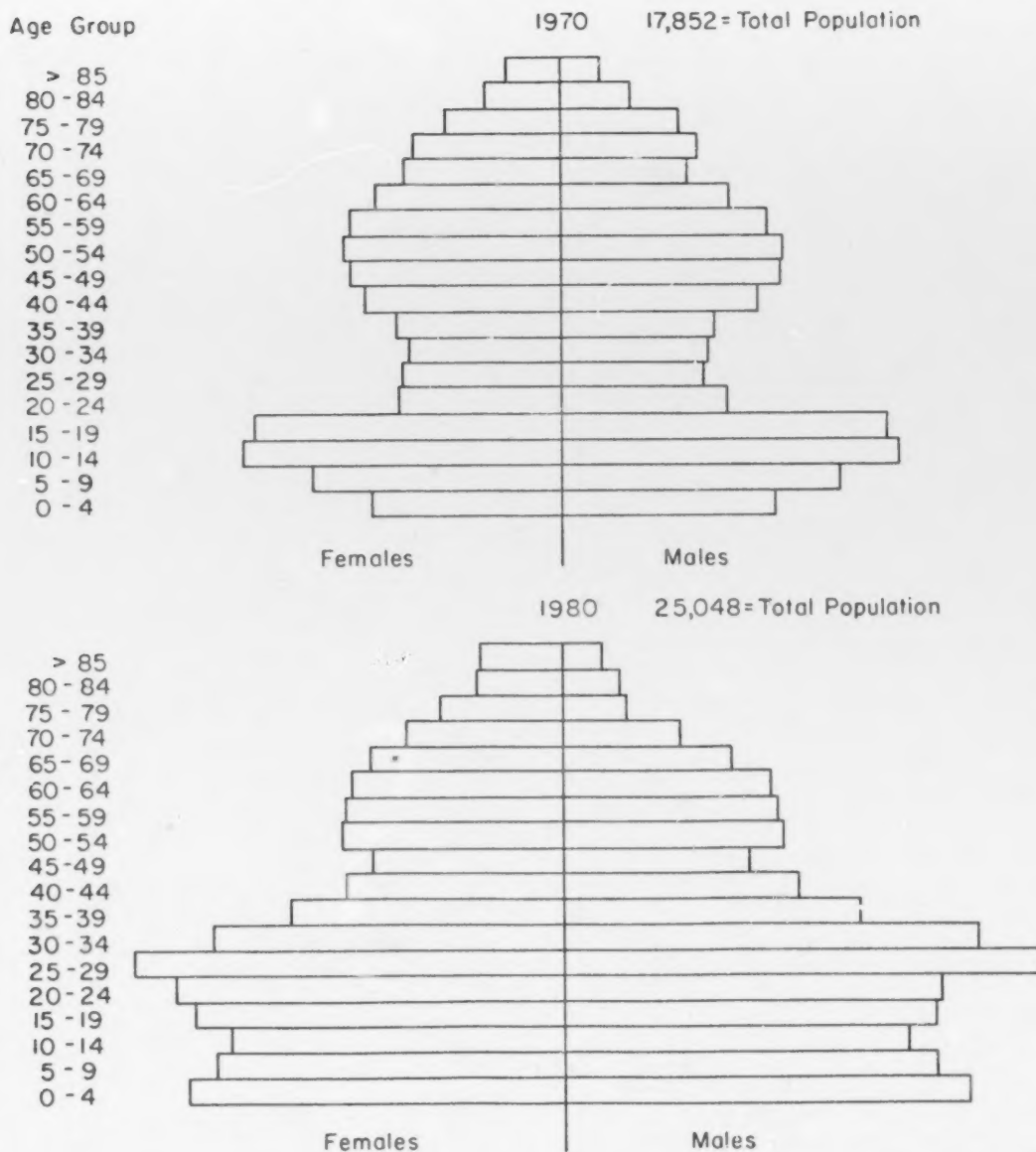
Timber

Significant forested areas lie within the boundaries of the Big Horn National Forest in Sheridan County. The small timber products industry produces such materials as ties, posts, and mine lumber. Major timber species in the forest are lodgepole pine and ponderosa pine.

THE PEOPLE

The total population of Sheridan County declined between 1950 and 1970. The net

Figure 1: Sheridan County; Age by Sex in 5-Year Age Groups, 1970, 1980



out-migration was most pronounced between 1950 and 1960 (-16.2 percent), with a slower rate of decline between 1960 and 1970 (-8.3 percent).

Between 1960 and 1970, the birth rate dropped from 19.4 births per 1,000 population to 13.4 births per thousand. At the same time, the death rate increased from 12.1 deaths per 1,000 population to 15.2 deaths per thousand.

Part of the dropping birth rate and increasing death rate might be attributed to Sheridan County's generally aging population during the decade of the 1960's, with the median age increasing from 35.0 years in 1960 to 36.8 years in 1970.

The decade of the 1970's was a period of boom for Sheridan County, with the resurgence of coal mining in the region. The city of Sheridan served as a major regional trade center for renewed activities in both Wyoming and southeastern Montana. During the decade of the 1970's, total county population increased by 40.31 percent, from 17,852 in 1970 to 25,048 in 1980, with the city of Sheridan accounting for 60.47 percent of the total county population. And additional growth is expected. According to DAFC population projections, the population of the county should reach 29,108 by 1985 and 32,721 by 1990.

The increase in population during the decade of the 1970's was accompanied by a dramatic reduction in the median age of county residents, reflecting an influx of young workers associated with coal mining activities. In 1970, the median age was 36.8 years, dropping to 29.8 years by 1980.

Perhaps as a result of an increasingly younger population, the number of marriages rose by 25.63 percent between 1971 and 1981; during the same period, the number of divorces grew by 59.54 percent. At the same time, the

numbers of births rose by 76.36 percent, while the number of deaths decreased by nearly 10 percent.

The number of aid-to-families-with-dependent-children (AFDC) and food stamp recipients also rose between 1972 and 1982, but not as sharply as the population increase during the 1970's. Between 1972 and 1982, AFDC recipients rose by 15.99 percent (see table 1), while the number of food stamp recipients rose by only 1.65 percent.

THE ECONOMY

Like many regional trade centers, employment in Sheridan County is concentrated in the government, services, and retail trade sectors. This employment pattern remained unchanged throughout the 1970's, although increases in mining (when one includes employment at the Decker Mine in Montana) were substantial.

According to data published by the Regional Economic Information Service (REIS), government employment accounted for 2,572 jobs in 1981, or 21.04 percent of total county employment. This was followed by services (2,076 jobs, or 16.98 percent) and retail trade (1,891 jobs, or 15.47 percent). According to data published by DEPAD, however, the largest single employer in Sheridan County during 1982 was Peter Kiewit & Son's Mining, with 754 employees. This was followed by the Sheridan County School District #2, with 504 employees, and the Veterans Administration Hospital, with 501 employees.

Coal employment in Sheridan County (excluding workers who live in Sheridan but work at the Decker Mine in Montana) accounted for relatively few workers--241 in 1982, according to State Mine Inspector figures. Two hundred and thirty-nine workers were employed at the Big Horn Mine, while the remaining two workers were employed at the Ash Creek Mine. As

Table 2: Personal Income by Major Sources (Thousands of Dollars)*

Source	Wyoming 1981		Sheridan County 1981		Sheridan County 1971	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	42703	.94	1654	1.04	3534	7.01
Ag. Serv., For., Fish, and Other	14720	.32	871	.55	339	.67
Mining	1167155	25.73	11445	7.17	2257	4.48
Construction	524627	11.56	20256	12.69	5132	10.18
Manufacturing	225847	4.98	9634	6.04	3082	6.12
Transportation & Public Utilities	471293	10.39	11704	7.33	3513	6.97
Wholesale Trade	251435	5.54	6237	3.91	1694	3.36
Retail Trade	412226	9.09	19547	12.25	7195	14.28
Finance, Insurance, & Real Estate	143506	3.16	8087	5.07	2226	4.42
Services	505006	11.13	29360	18.40	7300	14.48
Government	778058	17.15	40808	25.57	14126	28.03
Total	4536576		159603		50398	

*REIS Data

part of the general slowdown of mining activity related to the recession, the Big Horn Mine experienced some layoffs during the spring of 1983.

According to a growth management plan prepared by Centennial Engineering & Research, Inc. for Sheridan County in December 1980, coal related employment was projected to rise from about 1,600 employees in 1980 to about 3,600 employees in 1985. In addition, after 1983, coal related employment was expected to increase more than 20 percent annually through 1990, due to an expected rise in national demand for Sheridan County coal.

Obviously, such levels have not been attained. Nor do such growth levels appear likely in the near future, although with an improving economy--and in the event the Spring Creek Mine opens in Montana--some increase in coal-related employment can be expected.

The major contributors to personal income in Sheridan County are the government, services, construction, and retail trade sectors. In 1981, government accounted for 25.57 percent of total personal income generated, services for 18.40 percent, construction for 12.69 percent, and retail trade for 12.25 percent (see table 2).

With its many scenic and historic attractions, travel and tourism are major contributors to Sheridan County's economy. In 1981, travel-related expenditures in the county totaled \$12,255,000. Wages and salaries paid to employees directly serving travelers amounted to \$2,301,000, generating 345 jobs. State taxes generated by travel spending totaled \$375,000, while local taxes generated by such spending totaled \$184,000.

Although agriculture is no longer a leading contributor to personal income, Sheridan County still remains an important crops and livestock producer. Among all Wyoming counties in 1981, Sheridan County ranked third in the number of milk cows, sixth in the number of all cattle, seventh in winter wheat production, seventh in hay production, eighth in barley production, and eighth in oats production.

OUTLOOK

The outlook for Sheridan County is for continued growth and expansion. Mining activity in both Sheridan County and in southeastern Montana (with its attendant impact on Sheridan County) should expand, although perhaps not at the explosive rates of increase once predicted.

In addition, the city of Sheridan's position as a major regional trade center seems secure, and further expansion in the important government, services, and retail trade sectors seems assured as general economic activity in the region continues to increase.

S.T. Mast and Ruth Tebbutt, IPR

Selected Bibliography:

- Centennial Engineering and Research, Inc.
Growth Management Plan: Farmers Home Administration Section 601 Program for Clearmont, Dayton, Ranchester, Sheridan County (December, 1980).
- CH2M Hill, Inc. Prefeasibility Study--Tongue and Little Bighorn River Basins Project (Summary), Governor's Interdepartmental Water Conference, State of Wyoming (March, 1977).
- CSSA/ Wyoming Consulting Planners and Engineers.
An Update of the Comprehensive Plan for Sheridan County, Wyoming, Sheridan County Planning Office (1981).
- Department of Administration and Fiscal Control. Wyoming Data Handbook (1981).
- Department of Administration and Fiscal Control, Division of Research and Statistics. Wyoming Population and Employment Forecast Report (July, 1982).
- Frison, George C., et.al. The Big Goose Creek Site: Bison Procurement and Faunal Analysis.
- Goodier, John T. and Dale S. Hoffman. 1982 Wyoming Mineral Yearbook, State Department of Economic Planning and Development, Mineral Division.
- Kuzura, Stanley A. Black Diamonds of Sheridan: A Facet of Wyoming History, Pioneer Printing and Stationary (1977).
- Sheridan Pictorial History. Sheridan County Fulmer Public Library (1981).
- State Engineer's Office, Wyoming Water Planning Program. The Wyoming Framework Water Plan (May, 1973).
- State Inspector of Mines of Wyoming. Annual Report (for the year ending December 31, 1982).
- Stuart/Nichols Associates. Mineral Development Monitoring System, Department of Economic Planning and Development, Minerals Division.
- The Bureau of Reclamation. Anticipated Effects of Major Coal Development on Public Services, Costs, and Revenues in Six Selected Counties, Northern Great Plains Resources Program (September, 1974).
- "Tourism Impact on Wyoming--Part II," Travel Log, v. 22, no. 5 (September/October, 1982).
- University of Wyoming. Resources and Economy: Sheridan County, Wyoming Natural Resource Board (1964).
- Wyoming Industrial Development Corporation. Economic Blueprint Component of Public Investment Plan: Sheridan, Wyoming, State of Wyoming, Department of Economic Planning and Development (1975).

Campbell County Profile

PHYSICAL CHARACTERISTICS AND CLIMATE

Campbell County is located in the northeastern portion of Wyoming. It is bordered to the north by the state of Montana, to the east by Weston and Crook counties (Wyoming), to the south by Converse County, and to the west by Johnson County.

Campbell County comprises a land area of 4,756 square miles, or 3,043,840 acres, seventh largest county in Wyoming. Of the total acreage, 391,914 acres are owned by the federal government, 200,813 acres are owned by state and local governments, and 2,450,473 acres are privately owned.

Campbell County is located entirely within the vast reaches of the Powder River Basin between the Black Hills and the Big Horn Mountains. The southern portion of the basin is bounded by the Laramie Mountains; to the north, the basin extends 150 miles into Montana.

Geologically, the Powder River Basin is a broad asymmetric syncline, consisting of both Cretaceous and Tertiary strata. The basin is rich in both coal and oil. Although coal is found in Cretaceous strata, according to the Wyoming Geological Survey, the most important coals are limited to the Paleocene Fort Union Formation and the Eocene Wasatch Formation.

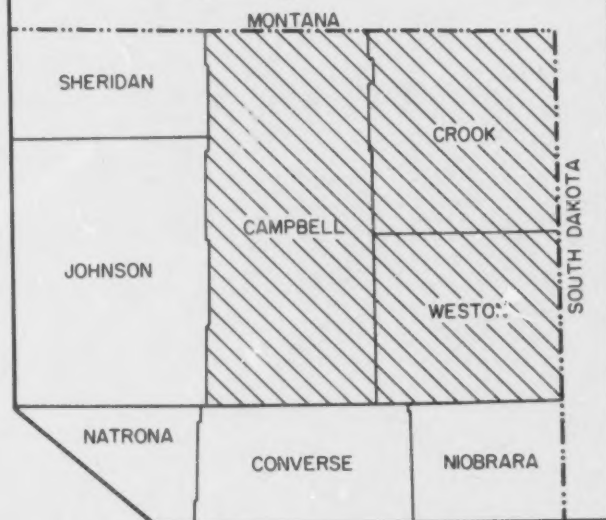
Topographically, Campbell County is characterized by gently rolling plains and grasslands. Elevations range from 3,400 ft. at the point where the Little Powder River flows from the northern end of the county to 6,060 ft. on North Pumpkin Butte.

The basin is drained by the Little Missouri River, by the Belle Fourche River, by the Cheyenne River, and by the Powder River. Most of the streams of Campbell County are intermittent. The headwaters of the Little Powder River are located in northern Campbell County and the headwaters of the Belle Fourche River are located in southern Campbell County.

Climatic conditions in Campbell County are strongly influenced by the Rocky Mountain Range. This topographic feature lies parallel to the basin, blocking much of the moisture. As a result, Campbell averages only 11" of precipitation per year in the southern portions of the county and 18" in the northeastern portions.

During an average year, two-thirds of the precipitation received by Campbell County occurs during March and April, with one-third occurring in the form of snow. While an annual average snowfall of approximately 50" occurs from November through April, peak snowfalls occur during March.

Map 2: Location Map of Campbell, Crook, and Weston Counties, Wyoming.



Droughts are common throughout the Powder River Basin. Although precipitation may exceed normal amounts throughout a full year, frequently it does not occur during critical periods of the growing season.

Campbell County is relatively cool, with an average annual temperature of 45°F. During the winter months, daily average temperatures range from 5°F to 45°F, although it is common for nighttime temperatures to drop well below 0°F from December through February while daytime temperatures rise to as much as 50°F. During the month of January, the difference between daytime and nighttime temperatures averages about 21°F.

Summers are generally mild, with short periods exceeding 100°F. The mean maximum daily temperature for July is 90°F. The nights are generally cool, with differences between daytime and nighttime temperatures for July averaging about 32°F.

HISTORY

Evidence of prehistoric man is well-established in the Powder River region. The Carter, Kerr-McGee site revealed evidence of Paleo-Indian hunters more than 10,000 years ago; the McKean site at Keyhole Reservoir, considered by some to be one of the best sites

Table 3: Campbell County Profile

Calendar Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1. Births	259.	255.	224.	251.	326.	394.	460.	503.	557.	715.	817.	885. ¹
2. Deaths	83.	86.	60.	75.	84.	79.	94.	78.	95.	88.	119.	117. ¹
3. Divorces	73.	60.	77.	65.	135.	103.	169.	144.	156.	223.	248.	270. ¹
4. Marriages ²	129.	121.	164.	154.	166.	230.	262.	283.	275.	335.	28400.	382. ¹
5. Population	12800.	12500.	12300.	12000.	13100.	15300.	17800.	20200.	22100.	24367.	26435.	27184. ³
6. Coal Production (HST)	INA	6438.	15760.	38143.	38168.	78021.	166200.	279346.	393226.	581572.	680664.	779274. ³
7. Valuation on Coal Production (H\$)	INA	6567.	18052.	67875.	88993.	292577.	672277.	1224380.	2156347.	3431711.	5083819.	6344648. ³
8. Oil Production (HBBL)	INA	308819.	328425.	337150.	263615.	266184.	305972.	294173.	246895.	213338.	202284.	202216. ³
9. Valuation on Oil Production (H\$)	INA	972595.	1351530.	2560119.	2193823.	2259737.	2827037.	3024182.	2947601.	4343381.	6655513.	6157725. ³
10. Natural Gas Production (HMCF)	INA	611138.	577139.	394406.	277887.	275560.	257819.	220900.	197316.	178250.	162126.	171882. ³
11. Valuation on Natural Gas Production (H\$)	INA	98432.	113133.	116387.	134730.	181073.	316227.	303977.	301077.	350873.	361447.	389078. ³
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
12. AFDC Recipients	INA	340.	353.	245.	196.	200.	269.	435.	554.	792.	859.	662.
13. Food Stamp Recipients	124.	223.	116.	75.	69.	51.	46.	60.	121.	223.	298.	313.
14. AFDC Payments (\$)	INA	49754.	47907.	36839.	28178.	30028.	46016.	81062.	110173.	183111.	220235.	180260.
Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83
15. Hotel, Motel, & Camp Sales & Use Tax Collections (\$)	58237.	53678.	53616.	64610.	55457.	73589.	85011.	81493.	159559.	58026.	75499.	73457.
16. Total & Sales Use Tax Collections (\$)	4494118.	4632552.	5334441.	6052518.	5719851.	6697774.	7015527.	6516372.	6230439.	5709714.	5729951.	4985949.
17. Liquor Sales (\$)	399794.	559884.	349423.	430316.	465355.	687130.	430838.	498597.	438565.	602584.	405664.	417942. ⁴
18. Gasoline Gallonage (GL)	5893347.	5487024.	5464673.	6194002.	6326254.	6226002.	5832602.	6345385.	6150021.	5350231.	5445415.	5720000.
19. Civilian Labor Force	15196.	14950.	15992.	18133.	18551.	18170.	18589.	21070.	21091.	20835.	20306.	21904.
20. Employment	14698.	14343.	15375.	17516.	17937.	17474.	17863.	20219.	20105.	19709.	18553.	20005.
21. Unemployment	498.	607.	618.	617.	614.	696.	726.	850.	986.	1125.	1753.	1899.
22. Unemployment Rate	3.3	4.1	3.9	3.4	3.3	3.8	3.9	4.0	4.7	5.4	8.6	8.7

¹Provisional data from the Wyoming Department of Public Health, Division of Vital Statistics.²1971 through 1979 and 1981 are estimates made by the U.S. Bureau of the Census, not an actual count as in 1980. 1982 is an estimate made by the Department of Administration and Fiscal Control.³Provided by the Campbell County Assessor.⁴Estimate based on trend and data for the first two months of the quarter.

Sources: Series 1-4: Wyoming Department of Public Health, Division of Vital Statistics. "Vital Statistics." Published yearly.
 Series 5: Regional Economics Information System, Bureau of Economic Analysis. Population data included in table of "Personal Income by Major Sources."
 Series 6-11: Annual Report: Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal year report.
 Series 12-14: Wyoming Division of Public Assistance and Social Services. Management Information and Statistical Report. Published biannually.
 Series 15: Sales and Use Tax Summary by County. Hotel, Motel, and Camp Sales Tax Collections. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.
 Series 16: Net Collections by Business Class by County. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.
 Series 17: Sales by County-City. Wyoming State Liquor Commission. Published monthly.
 Series 18: The Gasoline Gallonage Report. Petroleum Association of Wyoming. Gasoline consumption by county. Published monthly.
 Series 19-22: Employment Security Commission of Wyoming. Labor Force Trends. Published quarterly.

of its type in this part of the country, revealed evidence of man dating back 5,000 years.

During historic times, the area was first controlled by the Crow Indians and subsequently by the Sioux. The first written account of white men in the area dates to 1743, when a French Canadian expedition directed by the Chevalier Pierre De La Verendrye ventured westward through the area, until foreboding mountains and unfriendly Indians caused the expedition to turn back.

In 1811, the Wilson Price Hunt expedition crossed Campbell County in an attempt to capture the Snake River-Columbia River drainage fur trade. A few years later, American mountain men, including Jim Bridger and the Sublette brothers, passed through the area on their way west into the "beaver country" of the Big Horn and Wind River mountains.

In the early 1850's, the U.S. Government sent a topographical survey team to map the headwaters of the Cheyenne and Belle Fourche rivers.

By the early 1860's, traffic through the area increased as hundreds of prospectors and miners followed the Bozeman Trail to the gold strike at Virginia City, Montana. Numerous battles with Indians attempting to close the trail were fought between 1865 and 1868. Forts along the "Bloody Bozeman" were dismantled in 1868 and the land was returned to the Indians. By treaty, the Sioux were granted the land north of the Platte River and between the Big Horn Mountains and the Black Hills. However, Indian wars commenced again with the discovery of gold in the Black Hills in 1874. Finally, in 1876, the Sioux were suppressed and the Powder River region was opened to white settlement.

Large landowners--English gentrymen and eastern investors--established large cattle ranches, followed by small homesteaders and ranchers. Conditions were ideal for ranching; however, no efficient rail transportation to markets in Omaha and Chicago existed. Then in 1891, the Chicago, Burlington and Quincy (CB&Q) Railroad began construction of a line through Campbell County, reaching the site of present-day Gillette in August of the same year. The town of Gillette was named for Edward S. Gillette, chief surveyor for the railroad, and was incorporated in 1892.

Campbell County was created on February 13, 1911 from portions of both Crook and Weston counties. It was named for two men--Robert Campbell, a trapper and one of the men who built Ft. Laramie, and John Campbell, Wyoming's first territorial governor.

The early 1900's ushered in a busy era for Campbell County, as liberalized homestead policies brought an influx of new settlers. Gillette became established as an important sheep and cattle shipping point. Dryland wheat farming was introduced; tourism in its infancy was in evidence as Gillette accommodated travelers on their way to the Black Hills, the

Big Horns, and Yellowstone Park.

The first Campbell County coal mine, the Wyo-Dak Mine, opened in 1924. Coal was shipped to the Homestake Mining Company in Lead, South Dakota, and later to power plants owned by the Black Hills Power & Light Company.

A uranium strike following World War II spurred exploration activities and discovery of the mineral near Pumpkin Buttes in 1951. Area ranchers, unprepared for the influx of prospectors, established the Pumpkin Buttes Mining District. Under its terms, prospectors were required to possess district mining entry cards and to file claims with the district instead of with the county. However, uranium was not presented in sufficient quantities to warrant large-scale development.

The first oil well in Campbell County--a dry hole--was drilled in 1941 by Texas Gulf. However, Texas Gulf drilled another hole 20 miles north of Gillette and oil was discovered.

The mid-1950's was a period of significant oil exploration in Campbell County. But it was the discovery of the Belle Creek field in 1967 north of Gillette that stimulated a boom.

Gillette grew as energy development increased. In 1950, according to U.S. Census figures, the population was 2,191. In 1960, the population was 3,850.

NATURAL RESOURCES

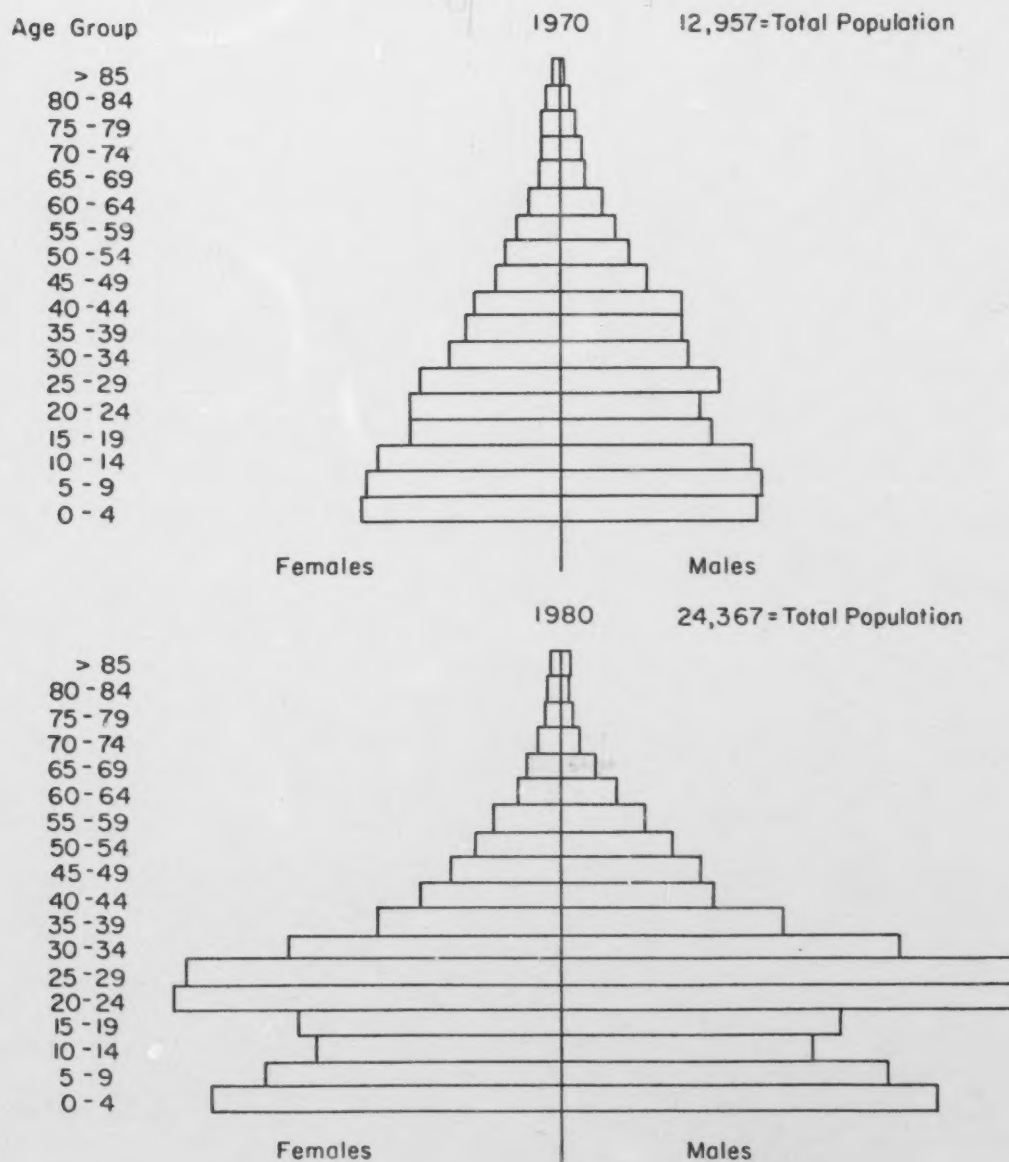
Minerals

Campbell County leads the state in assessed minerals valuation. The 1982 valuation of the county's oil, gas, and coal totaled \$1,210,393,963, or 20 percent of the state's total minerals valuation.

Oil was the major factor in transforming Campbell County from an agricultural to an energy extraction economy. As of 1981, oil remained the predominant force, accounting for 47 percent of the county's total assessed minerals valuation. Unit valuation of oil rose from \$20.46 per barrel in 1981 to \$32.90 per barrel in 1982. Total valuation rose from \$434 million to \$665 million, despite a 1.1 million barrel decrease in production. According to Department of Economic Planning and Development (DEPAD) projections, production will likely continue to decline while valuation holds steady or begins to decrease. However, a newly discovered oil and gas reserve known as the Amos Draw field complex could mean production increases in the years ahead. While the extent of the new discovery is not known, it has been compared favorably to large fields nearby--meaning the field could eventually yield as much as 100 million barrels of oil and billions of cubic feet of natural gas. Total 1982 oil production was 20,221,550 barrels, with a 1983 assessed valuation of \$615,772,477.

Natural gas production also has been declining, registering a 9 percent drop between 1980 and 1981. However, according to DEPAD

Figure 2: Campbell County; Age by Sex in 5-Year Age Groups, 1970, 1980



projections, production likely will increase during the next several years due to new discoveries and to the production of gas formerly used in secondary oil recovery. It has been estimated that gas production will reach 27 million mcf's by 1985. Total 1982 natural gas production was 17,188,170 mcf, with a 1983 assessed valuation of \$38,907,822.

Campbell County is one of the newest, and one of the largest, coal mining areas in the nation. Gillette sits atop the world's largest single coal deposit, an 80-mile long seam estimated to contain as much as 20 billion tons of minable coal. Thirteen surface mines currently are in production. While the oldest mine dates to the 1920's, most did not become operational until the 1970's. Campbell County coal is low in sulphur content, making it attractive for use in power plants; it is also close to the surface, thick-seamed, and thus amenable to highly mechanized mining operations requiring relatively little manpower.

In 1982, Campbell County produced 81 million tons of coal, 75 percent of the state total, according to State Mine Inspector figures. Total 1982 coal production was 77,927,422 tons, with a 1983 assessed valuation of \$634,464,846.

Other minerals (including scoria, sand and gravel, and uranium) mined in Campbell County had a combines total 1983 assessed valuation of \$251,923.

Water

For the most part, streams originating in Campbell County are the result of run-off from

snowmelt and rainfall. The Powder River, which flows across the extreme northwestern corner of the county, is the one stream which receives a part of its water from mountain areas. The major use of the limited surfacewater is for agriculture, mainly small livestock reservoirs.

Due to limited surfacewater resources, groundwater takes on added importance in Campbell County. At present, most groundwater is produced from either the Madison aquifer or from the Fort Union aquifer. Until June 1981, the city of Gillette relied on a well field north of town which tapped the Wasatch and Fort Union aquifers. However, because of production-capacity and water-quality limitations, the city found it desirable to develop an expanded system which taps the Madison aquifer northeast of Gillette. By the end of 1982, the total Gillette water system produced 1.8 million gallons of water per day, with the six Madison aquifer wells contributing slightly more than 1.4 million gallons to the total.

Groundwater is used mostly for livestock and domestic purposes. Little is used in irrigation due to high mineral contents in the shallow aquifers.

Water-related recreational activities are scarce in Campbell County, with few streams suitable for recreation available to the public. Keyhole Reservoir in nearby Crook County provides the best opportunities for public fishing and boating.

THE PEOPLE

Historically, Campbell County in general and the city of Gillette in particular have

Table 4: Personal Income by Major Sources (Thousands of Dollars)*

Source	Wyoming 1981		Campbell County 1981		Campbell County 1971	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	42703	.94	2058	.48	5771	16.01
Ag. Serv., For., Fish, and Other	14720	.32	462	.11	D#	-----
Mining	1167155	25.73	172303	40.38	7638	21.19
Construction	524627	11.56	112319	26.32	2393	8.03
Manufacturing	225847	4.98	3327	.78	228	.63
Transportation & Public Utilities	471293	10.39	25812	6.05	3562	9.88
Wholesale Trade	251435	5.54	16464	3.86	1261	3.50
Retail Trade	412226	9.09	27182	6.37	5026	13.94
Finance, Insurance, & Real Estate	143506	3.16	8378	1.93	D#	-----
Services	505006	11.13	2842	6.66	4386	12.17
Government	778058	17.15	29953	7.02	4399	12.20
Total	4536576		426684		36048	

*REIS Data

#Not shown to avoid disclosure of confidential information; data are included in totals.

experienced periods of boom activity. During the early 1890's, thousands of roughnecks building the Chicago, Burlington, and Quincy (CB&Q) Railroad swarmed into Gillette. During the late 1960's, an oil boom briefly resulted in a doubling of Gillette's population. Between 1960 and 1970, net migration to the county (total population less natural increase) increased 100.6 percent, according to U.S. Bureau of Reclamation figures.

Estimates presented in table 3 indicate that Campbell County's population declined and then stabilized during the early 1970's. However, population began increasing again as coal mining began in earnest. By 1980, Gillette's population has reached 12,134, while county population overall reached 24,367. Projections produced by the Department of Administration and Fiscal Control (DAFC) estimate that Campbell County's population will reach 38,713 by 1990. However, judging from data presented in the Campbell County Monitoring Program: 1982 Report, Campbell County may have already attained a population in 1982 of 33,300, with the city of Gillette accounting for 53.2 percent of the total.

In addition, the impacts of the recent slackening in demand for coal products make earlier population projections even more difficult to assess. Cancellation of the Hampshire Energy Synfuels Project and postponement of the Wyodak II power plant certainly will affect previous population forecasts. The total new population growth that would have been associated with the Hampshire Energy project alone during the peak construction years of 1985 and 1986 previously had been estimated at 8,749 and 10,042, respectively, according to documents filed with the Wyoming Industrial Siting Council.

The rapid population growth in Campbell County that occurred during the 1970's associated with energy resources development is typified by the town of Wright, located 38 miles south of Gillette. Wright is a modern, completely new community, created in 1976 by Atlantic Richfield to accommodate miners and other energy industry workers. In 1980, Wright had a population of 1,117, and some estimates suggest that the current population is over 1,500.

The social consequences of the rapid population growth in Campbell County are debatable. The so-called "Gillette Syndrome" became popularly associated with such social malaise as increases in crime, higher welfare payments, and higher divorce rates. However, a report on the Gillette Syndrome published in the Spring 1979 edition of Wyoming Issues, formerly published by the Institute for Policy Research, concluded that divorce rates appeared no higher than in other Wyoming communities, that welfare payments did not appear to grow because of population growth associated with energy development, and that while criminal activity did appear to increase with population growth, most of the increase was in property related crimes.

Between 1960 and 1970, the population of Campbell County became progressively younger. In 1960, the median age was 27.0 years; by 1970, the median age was 23.4 years. This trend is not surprising considering the number of generally young construction and energy industry workers who came to Campbell County during this period.

During the same period, the proportion of the population under 5 years of age decreased, from 13.2 percent to 8.9 percent, perhaps both a reflection of a generally declining birth rate and a preponderance of either single persons or young couples without children who migrated to the county. And even though the median age increased from 23.4 years in 1970 to 24.40 years in 1980, Campbell County still ranked as the county with the youngest overall population in the state.

The death rate in Campbell County declined between 1960 and 1970, from 7.51 deaths per thousand population in 1960 to 6.0 deaths per thousand in 1970.

Marriages increased between 1960 and 1970, from 8.5 marriages per thousand population in 1960 to 10.0 per thousand in 1970. At the same time, the divorce rate also increased, from 4.3 divorces per thousand population in 1960 to 5.5 per thousand in 1970.

Total disbursements for aid-to-families-with-dependent-children (AFDC) increased markedly between 1960 and 1970, from \$15,843 in 1960 to \$38,093 in 1970. The increase might be explained by the increasing numbers of dependent children as a proportion of the total population during the same period; that is, the number of children under 18 years of age. The trend might also suggest some greater use of public services as a consequence of the oil boom, although such a relationship is uncertain.

ECONOMY

Total employment in Campbell County increased from 2,370 in 1960 to 6,461 in 1975. Employment grew most in mining, construction, retail trade, and wholesale trade during the period. Agricultural employment was the only sector that showed a decline.

Employment increases in the county resulted in substantial shifts in employment composition. In 1960, agriculture and trade represented the dominant employment sectors, with 37.6 percent and 16.9 percent of total county employment, respectively. In 1975, mining and related activities represented the major employment sector, with 20.0 percent of total county employment. This was followed by trade (18.2 percent) and construction (15.1 percent). In 1982, mining represented 26.4 percent of total employment followed by construction (22.1 percent) and trade (18.6 percent), according to preliminary data published by the Campbell County Monitoring Program.

The increasing dominance of mining and energy development related activities in the economy of Campbell County is pointed out dramatically by examination of personal income data. In 1971, mining activities contributed 21.19 percent of total personal income in Campbell County, followed by farm income (16.01), and retail trade (13.94 percent).

By 1981, mining contributed 40.38 percent of total personal income in the county, followed by construction (26.32 percent) and government (7.02 percent). Farm income, second leading contributor to personal income in 1971, contributed only .48 percent in 1981--ranked tenth among the eleven categories shown in table 4. Over the same period, mining as a source of personal income increased by nearly 20 percentage points, while construction increased by over 18 percentage points.

Cost of living in Gillette has risen since 1982. When compared to the cost of living in Cheyenne as the base, between January 1982 and January 1983, the cost of food rose from 106.37 to 113.94, the cost of housing rose from 113.37 to 130.34, and the cost of all items rose from 107.60 to 116.55. Moreover, the January 1983 figures represent drops from October 1982 figures, when the comparative index numbers were even higher.

OUTLOOK

Despite cancellation of the Hampshire Energy project and postponement of the Wyodak II power plant, the outlook for Campbell County is for continued growth and expansion. According to the Campbell County Monitoring Program 1982 Report, projected county employment should exceed 21,300 by 1988, an increase of more than 2,800 jobs in six years. County population is expected to grow from an estimated 34,200 in 1983 to 38,400 by 1988.

Moreover, if the recent oil discovery at the Amos Draw field complex proves to be of major proportions, the economy would be stimulated even further.

"It is only in comparison with the boom conditions of recent years," the Campbell County Monitoring Report points out, "that future growth prospects can be viewed as diminished activity. Adopting a broader perspective, Campbell County is expected to experience a healthy level of growth and continued economic diversification."

S.T. Mast and Ruth Tebbut, IPR

Selected Bibliography:

Bragg, Bill. Campbell County: The Slumbering Giant, Holiday Inn (1978).

Browne, Bortz, and Coddington. The Campbell County Monitoring Program: 1980 Report, the Campbell County Monitoring Association (October 1981).

Brown, Bortz and Coddington. The 1982 Campbell County Socioeconomic Monitoring Report, the Campbell County Monitoring Association (May 1983).

City of Gillette/Campbell County Planning Commission. City of Gillette/Campbell County Comprehensive Planning Program (June 1978).

Department of Administration and Fiscal Control, Division of Research and Statistics. Wyoming Data Handbook: 1981.

Department of Economic Planning and Development, Mineral Division. 1982 Wyoming Mineral Yearbook (November 1982).

Gladstone Associates. Analysis of the Economic Base and Growth Potentials, 1976-1990: Gillette and Campbell County, Department of Planning and Development (June 1976).

Natural Resources Research Institute. Wyoming Weather Facts, Wyoming Natural Resource Board (June 1966).

Office of the State Inspector of Mines. Annual Report of the State Inspector of Mines of Wyoming for the Year Ending December 31, 1980.

The Bureau of Reclamation (Billings, Montana) and The Center for Interdisciplinary Studies (Montana State University). Anticipated Effects of Major Coal Development on Public Services, Costs and Revenues in Six Selected Counties.

Northern Great Plains Resources Program (September 1974).

Valeu and Associates, Inc. Hampshire Energy Housing Master Plan (April 1982).

Wyoming Industrial Development Corporation. Economic Blueprint Component of Public Investment Plan: Gillette, Wyoming, Department of Economic Planning and Development (1975).

Wyoming Research Corporation. Final Revised Socioeconomic Supplement to the Industrial Siting Permit Application of Hampshire Energy to Construct a Coal-to-Gasoline Facility in Campbell County, Wyoming (September 1982).

#

#

Crook County Profile

PHYSICAL CHARACTERISTICS AND CLIMATE

Crook County is located in the extreme northeastern corner of Wyoming. It is bordered by the state of Montana to the north, the state of South Dakota to the east, and Weston County, Wyoming, to the south. Only three incorporated communities--Hulett, Moorcroft, and Sundance (the county seat)--are located in the county. Among larger communities in the region, Gillette, Wyoming, is located 61 miles to the west and Rapid City, South Dakota, is located approximately 80 miles to the east.

Crook County is comprised of 1,854,080 total acres, or 2,897 square miles, ranking the county thirteenth in size among Wyoming counties. Some 284,725 acres within Crook County are federally owned, 160,521 acres are owned by state and local governments, and 1,408,834 acres are privately owned.

Elevations in the county range from 3,125 ft. near Aladdin (the lowest elevation in Wyoming) to 6,662 ft. at Warren Peak in the Black Hills. The county is comprised of two major topographic landforms: the Black Hills Uplift, which dominates the eastern two-thirds of the county, and the rolling hills of the Powder River Basin, which encompass the western third of the county.

The Black Hills, about half of which are located in Wyoming, extend about 125 miles in length and 55 miles in width along a northwestern-southeastern axis. The dense growths of ponderosa pine give the area its dark appearance and thus its name.

The Powder River Basin is a broad structural intermountain basin which encompasses much of northeastern Wyoming, extending from the Black Hills Uplift to the Big Horn Mountains (approximately 120 miles).

Among other major topographic features located in Crook County are Devil's Tower, known to the Indians as the "Bad God's Tower," and the Bear Lodge Mountains.

Devil's Tower is a massive, monolithic structure composed of igneous stone, rising 1,280 ft. above the Belle Fourche River. The tower measures 1,000 ft. in diameter at its base, averages 275 ft. in diameter near its top, and covers $1\frac{1}{2}$ acres. On September 24, 1906, President Theodore Roosevelt issued a proclamation making Devil's Tower the nation's first national monument.

Geologically, the Bear Lodge Mountains encompass the northwestern portion of the Black Hills Uplift, including Warren Peak and extending for approximately 120 miles. However, the Bear Lodge Mountains are a distinctive topographic feature, separated from the main

portion of the Black Hills by a broad, treeless valley. From 6,600-ft. Warren Peak, the main slopes of the Bear Lodge Mountains extend in a series of flat limestone plateaus down to elevations of 3,800-ft. in the northernmost portions of the range.

Crook County, located in the Missouri River Basin, is drained by the tributaries of the Little Missouri River and the Cheyenne River (principally, the Belle Fourche River). The Little Missouri River flows in a northeasterly direction through the county and into the state of Montana. The Belle Fourche River flows through the Black Hills, before emptying into the Cheyenne River in South Dakota.

The climate of Crook County is classified as semi-arid. The mean annual temperature for Sundance is 43.6°F, with mean temperatures during January of 20°F and mean temperatures during July of near 70°F.

Mean annual precipitation for Sundance is 17.41", with higher amounts in the mountain areas. Year-round temperatures range from highs of 100°F to occasional winter lows of -40°F. Precipitation ranges from an average of 15" per year at lower elevations to 25" at Warren Peak. Winter snowpack can be substantial, with as much as 40" accumulating on Warren Peak during the months of January and February alone.

Overall, however, the climate of the Black Hills is less windy and more moderate than most areas of northeastern Wyoming. Temperatures are more moderate and more precipitation occurs as rainfall than in most other areas of the region.

HISTORY

Evidence of prehistoric man in Crook County includes both the McKean site and the Vore site.

The McKean site is located in the Coulter Bay area of Keyhole Reservoir and was apparently used more or less continuously for as long as 5,000 years. Finds include scrapers, points, and shell fragments.

The Vore site was discovered as a result of survey work for Interstate 90 and is located east of Sundance. A natural sinkhole located beneath a hill, the Vore site is a classic "buffalo jump" area in use about 300 years ago.

The first record of white men in the area is 1811, when Wilson Price Hunt led a party of Astorians, exploring the territories of the Louisiana Purchase, through northern Crook County. The party followed the course of the Belle Fourche River for some distance before turning west to the Rocky Mountains.

In 1854, Sir George Gore of Ireland spent part of the summer with a large hunting party in the Black Hills region. The party traveled as

Table 5: Crook County Profile

Calendar Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1. Births	80.	56.	63.	82.	84.	77.	108.	111.	122.	115.	134.	136. ¹
2. Deaths	39.	32.	38.	33.	39.	43.	32.	47.	34.	38.	40.	28. ¹
3. Divorces	7.	17.	10.	18.	12.	15.	23.	17.	20.	24.	22.	20. ¹
4. Marriages ²	40.	41.	42.	59.	49.	61.	75.	55.	63.	76.	58.	72. ¹
5. Population ²	4500.	4600.	4500.	4500.	4700.	4900.	5000.	5200.	5300.	5308.	5400.	5455. ³
6. Oil Production (HBBL)	INA	33990.	34563.	32771.	30684.	32621.	29448.	26158.	25734.	57378.	26497.	29444. ³
7. Valuation of Oil Production (H\$)	INA	96308.	121536.	211068.	217717.	256506.	231888.	223281.	305432.	592775.	846312.	814700. ³
8. Natural Gas Production (HMC\$)	INA	8841.	6349.	3209.	1109.	1202.	1544.	1420.	1032.	1399.	1257.	6325. ³
9. Valuation of Natural Gas Production (H\$)	INA	936.	912.	602.	302.	377.	623.	412.	261.	379.	390.	165. ³
10. Bentonite Production (HT)	7858.	10127.	13409.	19556.	13766.	13990.	14814.	21798.	18227.	14389.	18969.	9470. ³
11. Valuation of Bentonite Production (H\$)	11001.	14178.	26424.	32321.	25524.	27722.	34005.	42698.	64715.	55000.	87808.	38896. ³
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
12. AFDC Recipients	INA	100.	131.	161.	159.	176.	187.	215.	243.	272.	275.	219.
13. Food Stamp Recipients	68.	79.	98.	88.	98.	67.	62.	72.	79.	135.	133.	155.
14. AFDC Payments (\$)	INA	18059.	23244.	27546.	21635.	30426.	38281.	45336.	50039.	58255.	67427.	62167.
Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83
15. Hotel, Motel, & Camp Sales & Use Tax Collections(\$)	10248.	6398.	4290.	7279.	14474.	7298.	3679.	5193.	11828.	6271.	2404.	5094.
16. Total Sales and Use Tax Collections (\$)	348529.	324456.	402763.	400573.	538163.	637479.	531075.	474399.	498347.	412387.	383273.	327749.
17. Liquor Sales (\$)	66718.	87162.	51108.	65378.	73335.	83532.	58871.	74595.	63570.	77277.	51514.	68499.
18. Gasoline Gallonage (GL)	1722437.	1239956.	1052201.	1412442.	1886068.	1392449.	1021531.	1431373.	1719713.	1167933.	990056.	1070000. ⁴
19. Civilian Labor Force	2650.	2517.	2227.	2592.	2495.	2427.	2345.	2655.	2593.	2494.	2444.	2927.
20. Employment	2543.	2443.	2164.	2526.	2434.	2317.	2201.	2537.	2505.	2349.	2208.	2703.
21. Unemployment	107.	74.	63.	67.	61.	109.	144.	118.	88.	145.	237.	224.
22. Unemployment Rate	4.0	2.9	2.8	2.6	2.4	4.5	6.1	4.4	3.4	5.8	9.7	7.7

¹Provisional data from the Wyoming Department of Public Health, Division of Vital Statistics.

²1971 through 1979 and 1981 are estimates made by the U.S. Bureau of the Census, not an actual count as in 1980. 1982 is an estimate made by the Department of Administration and Fiscal Control.

³Provided by Crook County Assessor.

⁴Estimate based on trend and data for the first two months of the quarter.

Sources: Series 1-4: Wyoming Department of Public Health, Division of Vital Statistics. "Vital Statistics." Published yearly.
 Series 5: Regional Economics Information System, Bureau of Economic Analysis. Population data included in table of "Personal Income by Major Sources."
 Series 6-11: Annual Report: Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal year report.
 Series 12-14: Wyoming Division of Public Assistance and Social Services. Management Information and Statistical Report. Published biannually.
 Series 15: Sales and Use Tax Summary by County. Hotel, Motel and Camp Sales Tax Collections. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.
 Series 16: Net Collections by Business Class by County. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.
 Series 17: Sales by County-City. Wyoming State Liquor Commission. Published monthly.
 Series 18: The Gasoline Gallonage Report. Petroleum Association of Wyoming. Gasoline consumption by county. Published monthly.
 Series 19-22: Employment Security Commission of Wyoming. Labor Force Trends. Published quarterly.

far as Inyan Kara Mountain, where Indians were encountered and the party was forced to turn south.

In 1857, Lt. G.K. Warren led a military and scientific expedition to explore the region. Once again, however, the group was halted by Indians near Inyan Kara Mountain.

Until the mid-1870's, northeastern Wyoming was "Indian territory." With its abundant game, pasturelands, and firewood, the Sundance Creek Valley was a favored place of the Sioux; Sundance Mountain near Sundance was a holy place, the site of the Sun Dance ritual.

But in 1874, with the discovery of gold in the Black Hills--and despite established treaties to the contrary--northeastern Wyoming was opened for white settlement.

As miners and settlers entered the territory, tensions with the Sioux increased and finally resulted in war. After the annihilation of Gen. George Armstrong Custer at the Little Bighorn in June 1876, Gen. George Crook, commander of the second Powder River expedition against the Sioux and their allies, defeated Dull Knife in November 1876 during a bitter winter campaign--thus ending major warfare in the Powder River region.

After suppression of the Indians, ranchers increasingly settled in Crook County. This movement was influenced by the presence of the Texas Trail, a "cattle road" in use from about 1870 to 1900, which followed the western boundary of the county. Many cattlemen following the trail remained in Crook County and established large ranch operations. The winter blizzards of 1886 and 1887, however, caused many large ranches to fail and thus brought an end to the "cattle baron" era.

Crook County was officially created in 1875, named for Gen. George Crook. It was the sixth county created in the Wyoming Territory, encompassing an area which today includes Crook, Campbell, and Weston counties. Modern-day Crook County was organized in 1885, with Sundance as county seat.

The town of Sundance was established by Albert Hoge in 1879 as a supply station for cattle ranchers. It was incorporated in 1887 and became a center for the county's social, governmental, and trading activities.

With the discovery of coal in eastern Crook County, and with the coming of the railroad, other communities sprang up as well.

Coal was discovered in the 1870's and the coal fields were surveyed in April 1882. Within 10 years, production exceeded hauling capacity.

At about the time of the coal discovery, the Chicago, Burlington, and Quincy Railroad (CB&Q) investigated the possibility of extending a rail line from Belle Fourche, South

Dakota, through Aladdin, located in the coal district. However, the CB&Q finally opted for a more southerly route, with the town of Moorcroft established along its path. Moorcroft thus became a major livestock shipping center, as well as a major mail distribution point.

During the 1890's, the Wyoming and Missouri Valley Railroad was incorporated and a rail line between Belle Fourche and Aladdin was finally constructed. The railroad operated between 1899 and 1927, although little coal was hauled after 1910. Of the communities which sprang up during the coal mining era, only Aladdin is still in existence today.

During World War I, many homesteaders settled in Crook County, where the climate favored dryland farming. For a time, the county grew and prospered. In the end, however, many small farms failed and Crook County became primarily a ranching area.

Increasingly, the heavily forested Bear Lodge Mountains became a source of timber products for an even more important sawmill industry. Several small mills operated in South Dakota and Wyoming, making support timbers for the Homestake Gold Mine at Lead, South Dakota, and for a coal mine near Aladdin.

In 1949, uranium was discovered in Crook County. Soon thereafter, the Homestake Mining Company opened its Hauber Mine north of Hulett. (The mine closed in 1967.)

During the late 1950's, the local economy received a temporary boost when the U.S. Air Force established a radar installation atop Warren Peak. The radar scanning unit was powered by the world's first air-transportable atomic power plant. The three radar domes were manned for nearly 10 years by a crew of about 200 persons, until new technologies rendered the facility obsolete.

NATURAL RESOURCES

Minerals

In 1983, the total assessed valuation on Crook County's minerals was \$85,586,563 (valued on 1982 production).

In 1982, mineral production accounted for 81 percent of Crook County's total assessed valuation, a 17 percent increase since 1977. The rise can be explained by the significant increase in crude oil prices during the period. The value of Crook County oil rose from \$7.86 per barrel in 1976 to \$31.94 per barrel in 1982, typical of oil prices throughout Wyoming. However, projections made by the Wyoming Department of Economic Planning and Development (DEPAD) indicate oil prices should stabilize or drop slightly over the near-term.

Table 5 indicates that oil production decreased by 3,088,100 barrels in 1981, while assessed valuation increased by over \$25 million. According to figures released by the

Crook County Assessor, oil production for 1982 was 2,944,373 barrels, while 1983 assessed valuation was \$81,470,049. Terra Resources was the major oil-producing entity, with a 1982 production of 531,718 barrels and a 1983 assessed valuation of \$13,888,296. As with all oil activity, Terra Resources operates in western Crook County.

In 1981, natural gas production was 125,662 mcf, a 10.19 percent decrease from 1980 (see table 5). As in the case of oil, DEPAD projects no dramatic increase in future natural gas production. Natural gas production in 1982 was 63,253 mcf, while 1983 assessed valuation was \$12,311. True Oil, the largest producer of natural gas, produced 23,144 mcf in 1982, with a 1983 assessed valuation of \$8,101.

Extensive bentonite deposits occur in northern and western Crook County. Crook County has been a leader in Wyoming bentonite since the turn of the century. In 1981, Crook County produced 1,896,932 tons of bentonite, with a 1982 assessed valuation of \$8,780,809. During 1982, according to figures provided by the Crook County Assessor, production dropped to 947,008 tons, with a 1983 assessed valuation of \$3,889,599 (see table 5). And according to DEPAD Mineral Resource Research Specialist Dale Hoffman, no significant increases in bentonite production are forecast.

Until the recent depression in the uranium industry, there was much interest in Crook County's uranium deposits. In 1953, the Lucky Mick Mine near Moorcroft began production. However, the deposit was depleted and the mine was closed in 1966. During the 1960's, Homestake Mining operated another uranium mine, which subsequently was closed in 1970.

Since 1970, firms have continued to express some interest in Crook County uranium. Between 1976 and 1978, Nuclear Dynamics, Inc. maintained an office in Moorcroft and was expected to begin solution-mining operations in the New Haven-Oshoto area. During the same period, Northern Energy Resource Company, a joint venture of Nuclear Dynamics, Bethlehem Steel, and others, announced plans for a \$2.5 million testing program in the Aladdin area. During the late 1970's, and responding to increasing yellowcake prices, Homestake Mining showed some interest in the possibility of reopening its mine and constructing a mill at the site. To date, however, none of these activities have resulted in new production.

Sand and gravel are also quarried in Crook County, accounting for a total 1983 assessed valuation of \$214,604. In addition, a number of minerals may have the potential for future development. A variety of metals occur in the Black Hills region, including gold, nepheline, tin, iron, silver, manganese, zinc, and lead. Extensive gypsum deposits also are present, as are a number of stone resources, including limestone--a basic component of the cement industry.

Water

Although the drainages of northeastern Wyoming contain mostly intermittent streamflows, Crook County is traversed by two perennial streams: the Belle Fourche River and the Little Missouri River.

Most of the outflow of area streams occurs during the months of May, June, and July in the form of runoff. Since crop requirements are greatest during July and August, the need for water control and storage became apparent. As a result, the Bureau of Reclamation constructed the Keyhole Dam and Reservoir located 12 miles northeast of Moorcroft. In addition to providing flood control and water storage, the reservoir provides municipal water supplies and recreational opportunities. Measured at the crest of the spillway, the reservoir has a total capacity of 199,900 acre-feet, with most of the water allocated for irrigation.

Allocation of the reservoir's water is governed by the Belle Fourche River Compact. Under the terms of the accord, 10 percent of the unappropriated flow of the Belle Fourche River is allocated to Wyoming and 90 percent is allocated to South Dakota, providing Wyoming shall have unrestricted use of the water for domestic and livestock purposes.

Abundant, good-quality water exists in deep aquifers throughout the Powder River Basin. In Crook County, Hulett draws water from two wells in the Minnelusa aquifer, Moorcroft draws water from seven wells in the Fox Hills-Lance aquifer, and Sundance draws water from four wells in the Madison aquifer, as well as from the Belle Fourche River (the only town in Crook County which uses surface water).

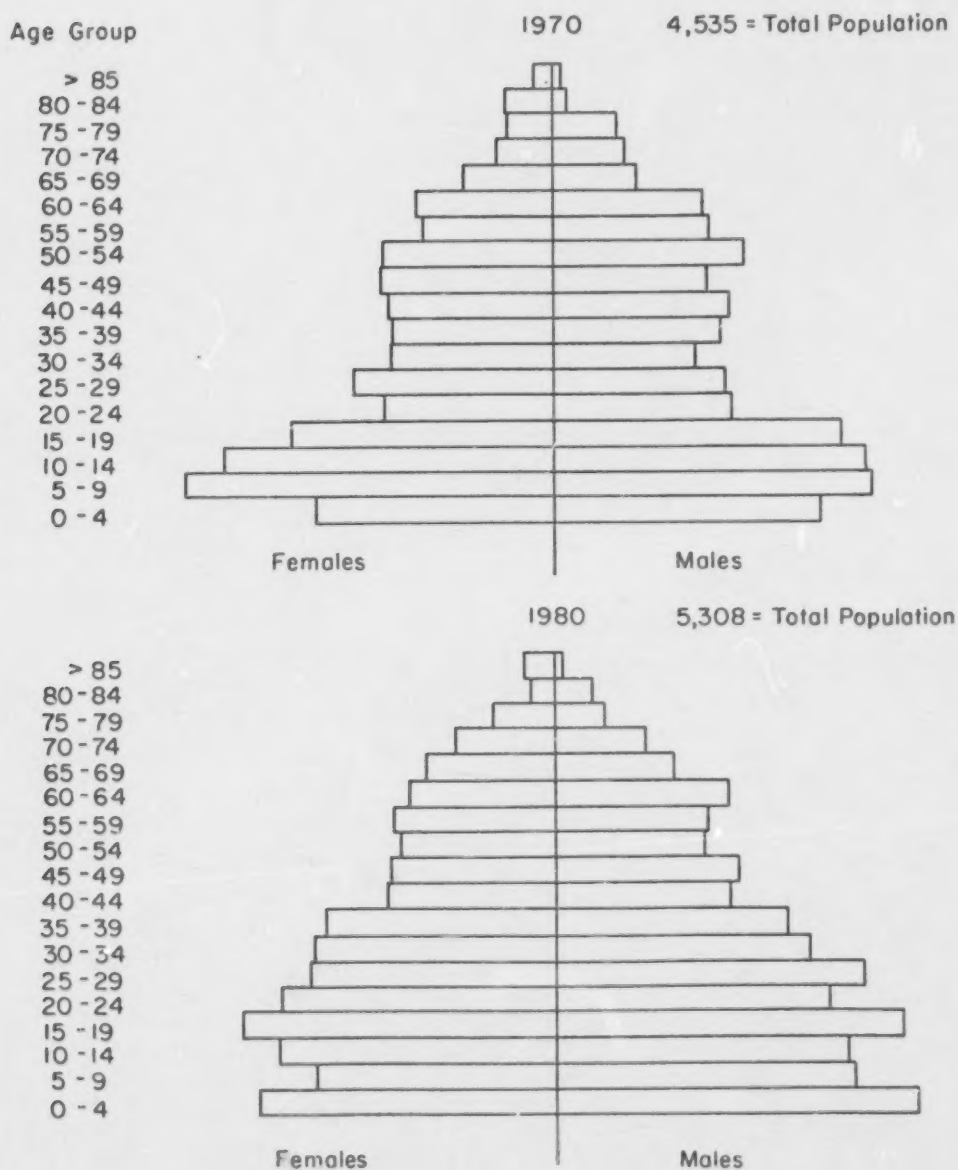
Timber

Crook County is blessed with many forested areas of Black Hills ponderosa pine. This includes 165,099 acres of private forested lands (approximately 50 percent of which have commercial value), 21,907 acres of state forested lands (16,931 with commercial value), 168,244 acres of National Forest lands (90 percent with commercial value), and 11,180 acres of forested BLM lands (7,782 with commercial value).

Approximately one million board feet of timber are cut on state forested lands each year; approximately 15 million board feet have been cut on Forest Service lands in recent years.

Three commercial sawmills operate in Hulett, with a fourth located north of Aladdin. The mills provide such timber products as rough lumber, posts, mine lumber, and firewood. In the future, the local timber industry might receive an additional boost if a proposed particle board plant is constructed near Rapid City, South Dakota, thus improving the market for small trees.

Figure 3 : Crook County ; Age by Sex in 5-Year Age Groups, 1970, 1980



THE PEOPLE

According to U.S. Census figures, Crook County had a 1960 population of 4,691, with a population density of only 1.62 persons per square mile. Sundance, the county seat, was the largest community, with a population of 908.

Between 1950 and 1960, the population of Crook County remained stable, with less than a 1 percent decrease during the decade. The slow decline in population continued through the 1960's. In 1970, according to census figures, the population of Crook County was 4,535, a decrease of 3.33 percent from 1960. Despite the decline in county population overall, the population of Sundance increased slightly to 1,056.

In 1980, according to census figures, the population of the county increased to 5,303 persons. Some of the increase can be attributed to "spillover" growth associated with energy development in nearby Campbell County. According to a 1978 Governor's Resource Management Tour publication, as many as 60 persons may commute daily from Sundance to jobs in Campbell County.

With no rail transportation, and with larger communities within relatively short distances, it is doubtful that Sundance will develop as a major regional trade center. Nevertheless, the 1977 Sundance Land Use Plan indicated that service-related business are expanding or locating in Sundance as the community grows.

The town of Hulett, whose population has remained nearly constant for many years, might expect some population increase if renewed interest is manifested in the county's uranium reserves. However, such interest is unlikely in the near-term.

According to Department of Administration and Fiscal Control (DAFC) projections, the population of Crook County is expected to increase in rather small numbers through the 1980's, reaching a population of 6,429 by 1990.

Between 1972 and 1982, aid-to-families-with-dependent-children (AFDC) payments increased sharply, from \$18,059 to \$62,167 (see table 5). The increase can be attributed to inflation, changes in eligibility requirements, and more recipients (100 in 1972 and 219 in 1982).

Per Capita Personal Income (PCPI) in Crook County in 1976 was \$6,032, slightly less than the overall Wyoming PCPI (\$6,791). By 1981, however, Crook County PCPI had risen to \$12,008 and had surpassed the overall Wyoming PCPI (\$11,733). The increase in Crook County can be attributed to inflation increases in the number of employees in the generally high paying local lumber industry, and the increased number of residents working in the high paying minerals industries in neighboring Campbell County.

Cost of living (when related to Cheyenne as the base) in Sundance has remained fairly steady in recent years, generally fluctuating within the range between 106-108 for all items.

Table 6: Personal Income by Major Sources (Thousands of Dollars)*

Source	Wyoming 1981		Crook County 1981		Crook County 1971	
	\$	% Total	\$	% of Total	\$	% of Total
Farm	42703	.94	1368	4.42	4138	35.27
Ag. Serv., For., Fish, and Other	14720	.32	D#	-----	101	.86
Mining	1167155	25.73	7408	23.96	D#	-----
Construction	524627	11.56	2593	8.39	400	3.41
Manufacturing	225847	4.98	2474	8.00	757	6.45
Transportation & Public Utilities	471293	10.39	4901	15.85	D#	-----
Wholesale Trade	251435	5.54	D#	-----	79	.67
Retail Trade	412226	9.09	2172	7.02	879	7.49
Finance, Insurance, & Real Estate	143506	3.16	845	2.73	369	3.14
Services	505006	11.13	2098	6.79	D#	-----
Government	778058	17.15	6467	20.91	2659	22.66
Total	4536576		30921		11734	

*REIS Data

#No shown to avoid disclosure of confidential information; data are included in totals.

THE ECONOMY

The major contributors to personal income in Crook County during 1981 were energy/minerals related industries, contributing 23.96 percent of total personal income. Government ranked second in importance, contributing 20.91 percent of the county total. Agriculture, historically a major economic force, was a relatively minor contributor to personal income (see table 6).

In 1981, the government sector was the largest employer, employing 486 persons, or 18.06 percent of the total number employed in the county. Energy/minerals related industries were second, employing 289 persons, or 10.74 percent of the total.

Between 1971 and 1981, Crook County experienced a net gain in total employment of 723 jobs, or an average annual growth rate of 3.67 percent. This compares to an average annual growth rate of 7.10 percent for the state of Wyoming overall during the same period.

According to DAFC employment projections, total employment is expected to increase slowly with total population increases over the decade of the 1980's, reaching 3,155 by 1990.

Another important facet of Crook County's economy is tourism and recreation. Since the opening of Devil's Tower in 1906, tourism has been a significant contributor to the local economy. Third quarter data for 1982 (at the height of the tourist season) indicate that 161,989 persons visited Devil's Tower.

In addition to Devil's Tower, Keyhole Reservoir and State Park, the Sand Creek public fishing area, and the Bear Lodge District of the Black Hills National Forest are located in Crook County--popular retreats for persons from adjacent counties such as Campbell County where outdoor recreational activities are limited.

In 1981, according to U.S. Travel Data Center figures, Crook County received \$3,562,000 from expenditures made by travelers. Wages and salaries paid local employees directly serving travelers amounted to \$737,000, generating 110 jobs in Crook County. State revenue generated by travel spending was \$109,000, while local revenue generated by travel was \$56,000.

OUTLOOK

The outlook for Crook County is for continued slow growth. Renewed interest in Crook County's uranium deposits could spark a surge in the local economy, but such a prospect appears doubtful in the near future. However, some population increase--beyond natural increases--might be expected as energy development continues in neighboring Campbell County and as workers choose to commute from Crook County. Local service industries also will probably expand at a slow pace, in keeping with county population increases.

S.T. Mast and Ruth Tebbutt, IPR

Selected Bibliography:

Crook County Historical Society. Pioneers of Crook County: 1876-1920, State Publishing (1981).

Crook County Planning Commission with assistance from the Tri-County Planning Office. Crook County Land Use Plan, Board of County Commissioners of Crook County (December 19, 1977).

Department of Administration and Fiscal Control, Division of Research and Statistics. Wyoming Data Book: 1981.

Department of Administration and Fiscal Control, Division of Research and Statistics. Wyoming Population and Employment Forecast Report (July, 1982).

Goodier, John T. and Dale S. Hoffman. 1982 Wyoming Mineral Yearbook, Department of Economic Planning and Development, Mineral Division (November, 1982).

Governor's Resource Management Tour: Crook and Weston Counties (June 21-23, 1978).

Hulett Planning Committee with assistance from the Tri-County Planning Office. Land Use Policy Plan for the Town of Hulett, Wyoming, Hulett Town Council (December 5, 1977).

Marcner, Brook E. Comparative Climate Graphs for Wyoming Stations, University of Wyoming (October, 1982).

Mattmueller, Rosella. "The Bad God's Tower," In Wyoming, pp. 31-32 (March, 1969).

McFarland, Mel. "Wyoming's First Coal Railroad," Annals of Wyoming, v. 53, no. 1, pp. 34-37 (Spring, 1981).

Sundance Planning Commission with assistance from the Tri-County Planning Office. Sundance Land Use Plan, Sundance Town Council (December 12, 1977).

"Tourism Impact on Wyoming--Part II," Travel Log, v. 22, no. 5 (September/October, 1982).

University of Wyoming. Resources and Economy of Wyoming and Its Counties, Wyoming Natural Resource Board (1964).

Wyoming Industrial Development Corporation. Economic Blueprint Component of Public Investment Plan, Department of Economic Planning and Development (1975).

#

Weston County Profile

PHYSICAL CHARACTERISTICS AND CLIMATE

Weston County is located in the northeastern corner of Wyoming, on the western slope of the Black Hills. It is bordered to the east by the state of South Dakota, to the north by Crook County (Wyoming), to the south by Niobrara County, and to the west by Campbell and Converse counties. The county includes two incorporated communities; Upton and Newcastle, the county seat.

Weston County comprises a land area of 2,408 square miles, or 1,541,120 acres, eighteenth largest county in Wyoming. Of the total acreage, 294,600 acres are owned by the federal government, 182,486 acres are owned by the state and local governments, and 1,064,034 acres are privately owned.

Two distinct topographic features are present in Weston County. The Black Hills Uplift encompasses the northeastern third of the county, while the balance of the land area is typified by the rolling plains of the Powder River Basin. Elevations range from 3,900 ft. in the plains areas to 6,750 ft. in the Black Hills.

The largest streams flowing through Weston County are Beaver Creek and its major tributary, Stockade Creek. Beaver Creek flows in a southeasterly direction through Weston County, before draining into the Cheyenne River in South Dakota. Most other streams in Weston County are intermittent.

Due to the presence of the Black Hills, the climate of Weston County is considered less harsh and windy than the climate in adjacent Wyoming counties located exclusively on the plains. The annual mean temperature for the county is 46.9°F. Data collected at a weather station in Newcastle between 1941 and 1970 revealed an average July temperature of 74°F and an average January temperature of 23°F.

The growing season in Weston County averages 137 days in length. The average date of the last freeze is May 16, while the average date of the first freeze is September 29. The growing season varies over the county, depending upon the specific topography and elevation.

By the same token, precipitation varies throughout the county, from approximately 12" per year at Hemphire in southern Weston County to 17" at Upton in the northcentral region. Snowfall ranges from 30" to 65" in the plains areas, with greater amounts in the Black Hills. The overall average snowfall for the county is 38.1."

HISTORY

Evidence of prehistoric man in Weston

County is limited. The Lissolo Cave, part of the McKean complex and considered to be of middle to late prehistoric vintage, consists of a campsite near a sheltered rock area. The only other site, the Whoop-up Canyon site, consists of several pre-1700 A.D. petroglyphic panels carved along the canyon walls.

Like most of the Powder River Basin-Black Hills region, until the 1870's Weston County was "Indian territory." With the discovery of gold in the Black Hills, however, activity increased. Ranches were established along the Texas Trail to Montana. Transportation facilities developed along the route of the Cheyenne-Black Hills stage line; freight companies operated along the same route.

At the direction of President Ulysses S. Grant, Walter Jenny led a group of miners and scientists from Ft. Laramie in 1875 to assess the mineral wealth of the Black Hills. Along the way, the party constructed a camp 7 miles north of present-day Newcastle that later became known as Jenny Stockade. The stockade served as a supply distribution point for provisions that were shipped to camps throughout the Black Hills. Jenny Stockade was later moved and is now located in Courthouse Square in downtown Newcastle.

In 1887, Frank W. Mondell, an engineer for the Chicago, Burlington & Quincy Railroad (CB&Q), discovered the Cambria coal field near Newcastle. As a result of the discovery, the CB&Q extended a rail line through the area, reaching Newcastle in November 1890. The town of Upton also sprang up in the wake of the railroad, serving first as a railroad camp and later as a shipping point for oil, bentonite, cattle, sheep, wheat, and lumber.

The town of Newcastle was initially established as a shipping and service center for the Cambria Mine and its associated camp. Named for the English mining district of Newcastle-on-Tyne, Newcastle became the major community in the area. The town was incorporated in 1889 and later became the county seat when Weston County (named for pioneer J.B. Weston, whose activities brought the railroad to the area) was officially organized from a portion of Crook County on March 12, 1890.

Cambria produced the only hard coal in the western region and thus its coal was in high demand. The mine produced over 12 million tons of coal, before closing in 1926. Today, only memories remain among the rubble of Cambria.

Oil was first discovered in Weston County at the Osage field in 1918. Additional discoveries at Clareton, Fiddler Creek, and other locations precipitated a major oil boom during the 1930's. Refineries were constructed at Newcastle and Osage.

A second oil boom occurred during the 1950's with discoveries at Donkey Creek and Coyote Creek. The boom continued until the mid-1960's, when oil activity and population began to decline. This trend was not reversed

Table 7: Weston County Profile

Calendar Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1. Births	94.	95.	101.	103.	98.	128.	143.	143.	168.	155.	191.	175. ¹
2. Deaths	61.	49.	65.	59.	53.	63.	58.	56.	71.	70.	56.	64. ¹
3. Divorces	27.	29.	30.	30.	25.	18.	33.	44.	35.	53.	45.	51. ¹
4. Marriages ²	79.	83.	88.	74.	75.	74.	62.	99.	89.	90.	88.	87. ¹
5. Population	6100.	6100.	6100.	6000.	6200.	6500.	6800.	7100.	7300.	7106.	7500.	7326. ³
6. Oil Production (HBBL)	INA	31210.	28793.	25321.	23998.	22334.	20045.	19331.	19313.	18401.	24017.	27134. ³
7. Valuation of Oil Production (H\$)	INA	105863.	119086.	198349.	230654.	236622.	235685.	279850.	446404.	650813.	862645.	879977. ³
8. Natural Gas Production (HMC\$)	INA	3285.	2779.	3846.	4062.	10807.	12646.	10345.	9955.	7017.	8004.	15949. ³
9. Valuation of Natural Gas Production (H\$)	INA	409.	441.	703.	1978.	12716.	22480.	18820.	20613.	17579.	22513.	45172. ³
10. Bentonite Production (T)	INA	144427.	216938.	198598.	90330.	289339.	283855.	94292.	333752.	276968.	582720.	140066. ³
11. Valuation of Bentonite Production (H\$)	INA	2022.	4576.	4562.	2511.	8452.	7526.	16275.	17789.	11164.	33982.	6886. ³
Fiscal Years	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
12. AFDC Recipients	INA	318.	285.	342.	332.	317.	297.	294.	340.	270.	319.	316.
13. Food Stamp Recipients	169.	223.	203.	160.	187.	185.	159.	147.	140.	157.	171.	174.
14. AFDC Payments (\$)	INA	47698.	47911.	57090.	54814.	60813.	62114.	61169.	77160.	68115.	78121.	89554.
Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83
15. Hotel, Motel, & Camp Sales & Use Tax Collections (\$)	22864.	10153.	12109.	18090.	28993.	14734.	14394.	16385.	21618.	12154.	8241.	8568.
16. Total Sales & Use Tax Collections (\$)	714547.	637971.	724037.	767900.	816841.	850552.	848283.	824390.	767206.	742856.	811763.	673045.
17. Liquor Sales	91126.	118969.	78083.	81390.	90799.	124190.	86920.	86922.	87138.	110344.	74343.	86828. ⁴
18. Gasoline Gallonage (GL)	1441175.	1155059.	1034821.	1397387.	1470606.	1458166.	1105980.	1342131.	1594849.	1232967.	1014383.	1190000.
19. Civilian Labor Force	3216.	3162.	3372.	3743.	3823.	3670.	3559.	3687.	3641.	3623.	3581.	3875.
20. Employment	3127.	3058.	3267.	3647.	3749.	3559.	3411.	3492.	3418.	3372.	3197.	3495.
21. Unemployment	89.	104.	106.	96.	74.	111.	149.	195.	223.	252.	385.	380.
22. Unemployment Rate	2.8	3.3	3.1	2.6	1.9	3.0	4.2	5.3	6.1	6.9	10.7	9.8

¹Provisional data from the Wyoming Department of Public Health, Division of Vita Statistics.²1971 through 1979 and 1981 are estimates made by the U.S. Bureau of the Census, not an actual count as in 1980. 1982 is an estimate made by the Department of Administration and Fiscal Control.³Provided by the Weston County Assessor.⁴Estimate based on trend and data for the first two months of the quarter.

Sources: Series 1-4: Wyoming Department of Public Health, Division of Vital Statistics. "Vital Statistics." Published yearly.
 Series 5: Regional Economics Information System, Bureau of Economic Analysis. Population data included in table of "Personal Income by Major Sources."
 Series 6-11: Annual Report: Department of Revenue and Taxation, Ad Valorem Tax Division. Fiscal year report.
 Series 12-14: Wyoming Division of Public Assistance and Social Services. Management Information and Statistical Report. Published biannually.
 Series 15: Sales and Use Tax Summary by County. Hotel, Motel and Camp Sales Tax Collections. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.
 Series 16: Net Collections by Business Class by County. Wyoming Department of Revenue, Sales and Use Tax Division. Published monthly.
 Series 17: Sales by County-City. Wyoming State Liquor Commission. Published monthly.
 Series 18: The Gasoline Gallonage Report. Petroleum Association of Wyoming. Gasoline consumption by county. Published monthly.
 Series 19-22: Employment Security Commission of Wyoming. Labor Force Trends. Published quarterly.

until the 1970's, when the coal boom in adjacent Campbell County once again began attracted people to the area.

Historically, Weston County has served as a "gateway" to the Black Hills. First, there was the Cheyenne-Black Hills state route. And when in 1914 the Black and Yellow Highway linked Minneapolis with the Black Hills and Yellowstone National Park, Weston County was along the path. Today, Weston County still remains an important west entrance access point to the Black Hills region.

Agriculture also has played a significant role in Weston County history. With liberalized homestead policies, homesteading increased during the World War I era. However, many persons left in despair, having failed to survive on the small parcels allotted by the federal government. Dryland wheat farming was introduced, but only with limited success.

The Thunder Basin National Grassland in Weston and Campbell counties is a monument to failed effort, consisting as it does of homesteads repurchased by the federal government from broke and discouraged farmers.

NATURAL RESOURCES

Minerals

In 1981, minerals accounted for 75 percent of the total assessed valuation in Weston County. Of the total minerals valuation, oil valuation accounted for 94 percent, or \$86,264,500.

The State Department of Economic Planning and Development (DEPAD) notes that oil production has been declining since the early 1960's, with the exception of 1969 and 1970 when secondary oil recovery activity resulted in slight increases. However, oil production increased in 1981 by 561,000 barrels, the result of increased drilling activity. The production increase, plus a \$.62 per barrel increase in the unit valuation of oil, caused the value of Weston County production to increase by \$21.2 million. Total 1982 oil production was 2,713,435 barrels, with an assessed value of \$87,997,720.

Weston County natural gas production increased from 701,648 mcf to 800,383 mcf between 1980 and 1981, with the value of production increasing by \$.50 per mcf. Total 1982 natural gas production was 1,594,853 mcf, with an assessed value of \$4,517,197.

Bentonite accounts for the balance of major county minerals production. County production in 1981 was 582,000 tons; DEPAD projects a short-term decrease in production due to a slackening in demand as a result of lower levels of oil drilling activity. Total 1982 bentonite production was 140,066 tons, with an assessed value of \$688,634.

Some sand and gravel is also produced in

Weston County--76,190 tons in 1982, with an assessed value of \$60,952.

Water

Most of the streams in Weston County are intermittent, with most of the streamflow occurring during the months of May, June, and July as spring runoff. Since crop water needs are greatest during July and August, water storage is a critical concern.

Numerous stockwater reservoirs exist throughout Weston County. In addition, two multiple-use reservoirs are located near Newcastle.

In the absence of large surfacewater supplies, groundwater becomes essential. Groundwater available from wells in Weston County is situated in bedrock formations. In general, the quality of the groundwater ranges from poor to fair.

The town of Newcastle draws its water supply from three artesian wells. The town of Upton draws its water from two Madison aquifer wells and two Lakota aquifer wells. In addition, a third Madison aquifer well has been drilled but is not yet in service.

Timber

The timber industry of Weston County produces such products as rough lumber, finished lumber, and paneling from Black Hills ponderosa pine. According to the 1980-81 Timber Industries Directory, three timber products companies were operating in Weston County, two located in Newcastle, and one located in Osage.

THE PEOPLE

In 1970, the population of Weston County was 6,307, or a population density of 2.62 persons per square mile. This represents a 20 percent decline in population during the decade of the 1960's. During this period, the population of Newcastle, the largest community, declined by 21 percent; the population of Upton, the second largest community, decreased by 19.36 percent. Still, by 1970, 70.1 percent of the people living in Weston County resided either in Newcastle or Upton.

By 1980, the population had increased, reaching 7,106 persons, or a population density of 2.95 persons per square mile. The population of Newcastle was 3,596 (a 4.78 percent increase from 1970), accounting for 16.79 percent of total county population; the population of Upton was 1,193 (a 20.87 percent increase from 1970), accounting for 50.61 percent to total county population.

According to population projections published by the State Department of Administration and Fiscal Control (DAFC), the population of Weston County is expected to continue increasing throughout the decade of the

Figure 4: Weston County; Age by Sex in 5-Year Age Groups, 1970, 1980

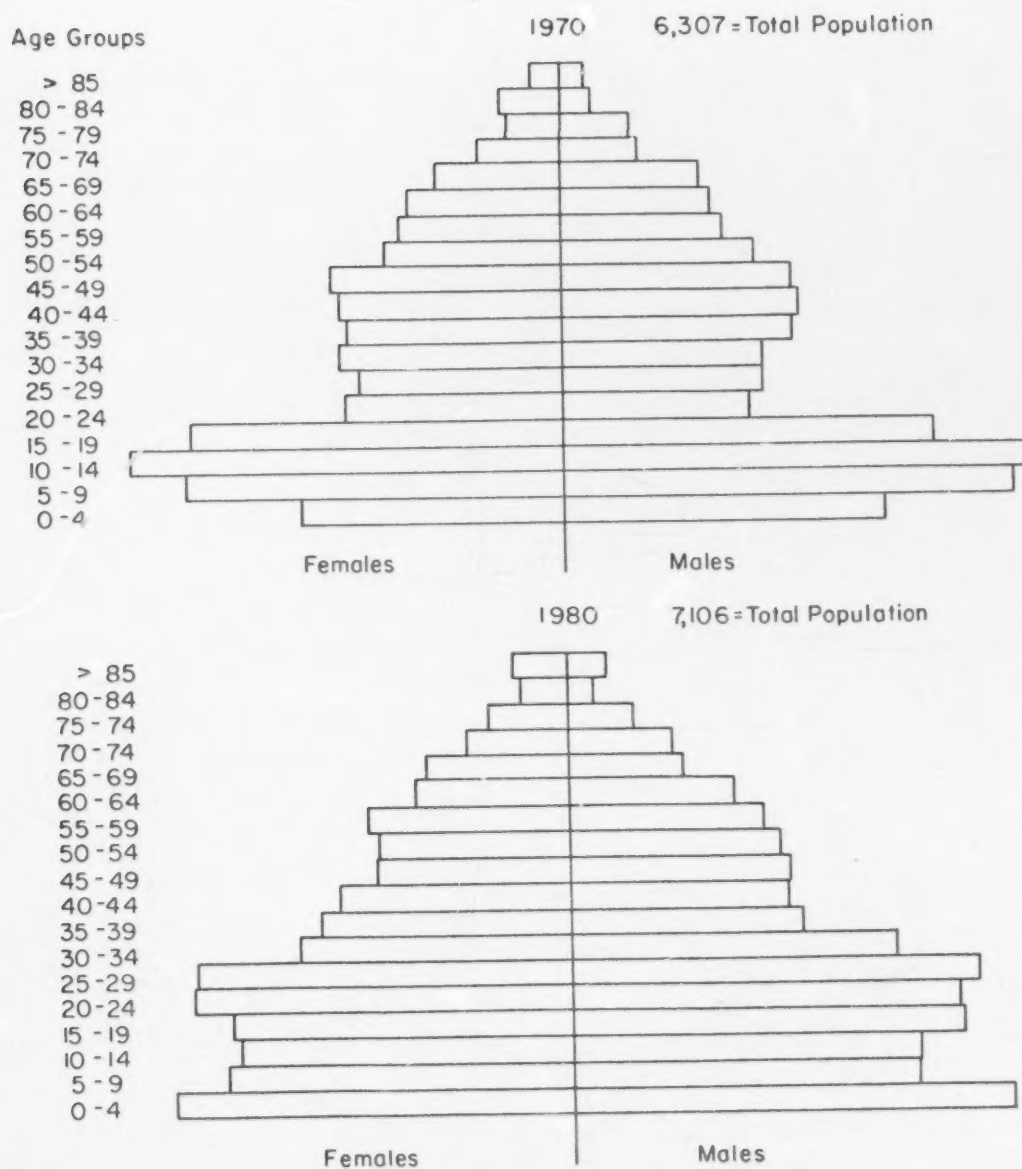


Table 8: Personal Income by Major Sources (Thousands of Dollars)*

Source	Wyoming 1981		Weston County 1981		Weston County 1971	
	\$	% of Total	\$	% of Total	\$	% of Total
Farm	42703	.94	80	.13	2731	15.18
Ag. Serv., For., Fish, and Other	14720	.32	D#	-----	55	.31
Mining	1167155	25.73	24804	40.89	3113	17.30
Construction	524627	11.56	3199	5.27	598	3.32
Manufacturing	225847	4.98	5685	9.37	1433	7.97
Transportation & Public Utilities	471293	10.93	7611	12.55	2489	13.33
Wholesale Trade	251435	5.54	D#	-----	272	1.51
Retail Trade	412226	9.09	4503	7.42	10.55	
Finance, Insurance, & Real Estate	143506	3.16	1352	2.23	437	2.43
Services	505006	11.13	D#	-----	1538	8.55
Government	778058	17.15	8186	13.50	3427	19.05
Total	4536576		60657		17991	

*REIS Data

#Not shown to avoid disclosure of confidential information; data are included in totals.

1980's, reaching 8,657 persons by 1990.

The number of persons receiving public assistance remained nearly constant throughout the 1970's. In 1970, the number of aid-to-families-with-dependent-children (AFDC) recipients was 318, decreasing negligibly to 316 by 1980. By the same token, the number of food stamp recipients was 169 in 1970 and 174 in 1980.

THE ECONOMY

In 1981, total employment in Weston County was 4,003, a 42.71 increase since 1971 and faster than the rate of population growth during the same period. This represents a 3.67 percent average annual increase during a 10-year period. In the main, the annual increases were small, except for 1979 and 1981. During 1979, employment increased 9.71 percent over the preceding year, while in 1981, employment increased by 9.58 percent over the preceding year. The employment increases over the period can be attributed to a local boom in oil drilling and related activities, and to increases in railroad employment (nonpermanent employment in both cases).

In 1981, the leading employment sectors were mining, government, and retail trade. Mining accounted for 22.18 percent of total

county employment, government for 15.49 percent, and retail trade for 10.74 percent.

The major contributors to personal income in Weston County are mining, government, and transportation and public utilities. In 1981, mining contributed 40.89 percent of county personal income, government 13.50 percent, and public utilities and transportation 12.55 percent. Between 1971 and 1981, farm-related activities declined from a major to a minor contributor to personal income (see table 8).

Weston County is located at the threshold of the Black Hills and thus benefits from the seasonal tourist trade. Excellent trout streams and wildlife abound throughout the area. In addition, the Anna Miller Museum in Newcastle houses many items of interest to western history buffs.

In 1981, travel-related expenditures in Weston County totaled \$6,534,000. Wages and salaries paid employees directly serving the traveler amounted to \$1,208,000, generating 196 local jobs. In addition, travel generated \$218,000 in state tax revenue and \$99,000 in local tax revenue.

OUTLOOK

The outlook for Weston County is for

steady growth, with the very real possibility that renewed oil exploration and production activity could quicken the pace of expansion even further in the near-term. With additional drilling activity, bentonite production also would increase. In addition, Weston County (and the town of Newcastle in particular) will continue to be affected by "spillover" associated with the coal mines located in southern Campbell County, both in terms of population impacts and in terms of general economic activity.

S.T. Mast and Ruth Tebbut, IPR

Selected Bibliography:

Baker, Donna K. "Weston County," Wyoming on Review, pp. 105-106 (1966).

Department of Administration and Fiscal Control, Division of Research and Statistics.
Wyoming Data Handbook: 1981.

Department of Administration and Fiscal Control, Division of Research and Statistics.
Wyoming Population and Employment Forecast Report (July, 1982).

Goodier, John T., et. al. 1982 Wyoming Mineral Yearbook, State Department of Economic Planning and Development, Mineral Division (November, 1982).

Logan, John. 1980-81 Wyoming Timber Industry Directory, Department of Economic Planning

and Development, Industrial Development Division (December, 1980).

Martner, Brooks E. Comparative Climate Graphs for Wyoming Stations, University of Wyoming (October, 1982).

Newcastle Planning Commission with assistance from the Tri-County Planning Office. Upton Land Use Plan, Upton Town Council (January 17, 1978).

"Tourism Impact on Wyoming--Part II," Travel Log, v. 22, no. 5 (September/October, 1982).

University of Wyoming. Resources and Economy: Wyoming and its Counties, Wyoming Natural Resource Board (1964).

Upton Planning Board with assistance from the Tri-County Planning Office. Upton Land Use Plan, Upton Town Council (January 17, 1978).

Weston County Planning Commission with assistance from the Tri-County Planning Office. Weston County Land Use Plan, Weston County Board of County Commissioners (December 19, 1977).

Wyoming Industrial Development Corporation.
Economic Blueprint Component of Public Investment Plan: Upton, Wyoming, Department of Economic Planning and Development (1975).

#

#

ECONOMIC CHANGES

ECONOMIC CHANGES

(Editor's Note: The purpose of this section, appearing for the first time in the Quarterly Update, is to point out areas in the Wyoming economy in which noteworthy changes occurred or in which existing trends were significantly accentuated during the latest reporting period.)

Several noteworthy developments occurred between the first and the second quarters of 1983 in the Wyoming economy.

The state's unemployment rate, which had increased steadily since the fourth quarter of 1981, finally began to drop. The first quarter 1983 rate of 10.6 percent dropped to 10.1 for the second quarter. At the same time, the number of initial unemployment claims filed also dropped, from 15,650 in the first quarter to 11,176 in the second quarter.

Business failures increased sharply from the first to the second quarters, as did the number of personal bankruptcies to a lesser degree, although the absolute numbers were relatively small in both cases. The number of business failures reported rose from 47 to 66, while the number of personal bankruptcies rose from 140 to 152.

The construction indicator performed well overall during the second quarter. The number

of new residential dwelling units reached their highest level since the third quarter of 1980, or a total of 1,113 units. In addition, the number of building permits for selected Wyoming cities increased from 2,762 during the first quarter of 1983 to 3,586 during the second quarter. The positive performance probably was related to the construction mortgage interest rate which dropped to 11.95 percent in the second quarter, its lowest level since the third quarter of 1980.

The most recent decline in Wyoming oil production began to level out during the second quarter of 1983. Between the first and second quarters of 1983, production dropped only 1,000 barrels per day, from 335,000 barrels per day to 334,000 barrels per day.

Violent crimes in Wyoming fell to their lowest levels of anytime during the Update's 12-quarter reporting period in the second quarter of 1983--a total of 274, down from 301 reported in the first quarter. In other items of interest, sales and use tax collections dropped sharply between the first and second quarters of 1983, while total gas consumption continued to sharply increase through the second quarter, probably a reflection of the unseasonably cold weather throughout the spring.

S.T. MAST, IPR

#

#

**WYOMING
DATA**

Table 9: Agriculture¹

Calendar Quarters	3/80	4/80	1/81	2/81
1. Timber Cut in Wyoming National Forests (MBF) Price Indices ² (1967=100)	25538.	34190.	25395.	5810.
2. Wyoming Crops, Prices Received-Latest	330.	346.	347.	371.
3. Wyoming Crops, Prices Received-Average	308.	316.	350.	347.
4. U.S. Crops, Prices Received-Latest	259.	272.	280.	265.
5. U.S. Crops, Prices Received-Average	251.	267.	278.	271.
6. Wyoming, All Commodities, Prices Received-Latest	304.	281.	279.	290.
7. Wyoming, All Commodities, Prices Received-Average	285.	281.	277.	284.
8. U.S., All Commodities, Prices Received-Latest	260.	264.	261.	260.
9. U.S., All Commodities, Prices Received-Average	255.	263.	263.	260.
10. Wyoming Livestock, Prices Received-Latest	297.	261.	259.	265.
11. Wyoming Livestock, Prices Received-Average	282.	274.	255.	266.
12. U.S. Livestock, Prices Received-Latest	262.	259.	246.	257.
13. U.S. Livestock, Prices Received-Average	259.	261.	250.	251.
14. Prices Paid by U.S. Farmers-Latest	286.	292.	302.	306.
15. Prices Paid by U.S. Farmers-Average	284.	291.	300.	305.

¹First time readers of WQU should refer to the "Format" page (in back) for an

²The index for the last month (latest) of each quarter, along with the average

Sources: Series 1: United States Forest Service. "Timber Cut and Sold, Con-
Series 2-15: Wyoming Crop and Livestock Reporting Service. Bi-week

3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83
25613.	33929.	11658.	4285.	23430.	26318.	14707.	5208.
315.	288.	260.	249.	255.	264.	243.	256.
325.	301.	275.	251.	250.	262.	250.	251.
232.	234.	232.	240.	240.	223.	231.	243.
249.	232.	238.	240.	237.	223.	224.	245.
270.	239.	256.	256.	255.	232.	263.	251.
267.	251.	248.	261.	249.	240.	249.	257.
243.	233.	244.	252.	249.	233.	243.	246.
252.	236.	243.	251.	249.	235.	240.	249.
257.	224.	254.	258.	255.	222.	269.	250.
250.	236.	239.	264.	249.	233.	249.	258.
254.	233.	254.	262.	257.	242.	254.	248.
256.	240.	248.	261.	253.	246.	253.	252.
306.	304.	314.	317.	316.	315.	321.	324.
306.	305.	313.	315.	317.	315.	320.	324.

planation of abbreviations and table formats.
of the three monthly indices of each quarter.

tible Products." Region 2 and 4 reports published quarterly.
Ag Statistics.

Table 10: Banking and Finance

Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83	
1. Total Bank Loans (T\$)	1722916.	1764381.	1808747.	1898325.	1929706.	1984965.	2004233.	2123492.	2138495.	2147498.	2172221.	2224108.	
2. Total Bank Deposits (T\$)	2826427.	3034647.	2968348.	3112270.	3161593.	3278504.	3237333.	3322621.	3345619.	3587554.	3537206.	3669552.	
3. Total Bank Demand Deposits (T\$)	839111.	878444.	736161.	737837.	759658.	731429.	657349.	635856.	649332.	680332.	576257.	579672.	
4. Bankers' Loan-Deposit Ratio	.610	.581	.609	.610	.610	.605	.619	.639	.639	.639	.599	.614	.606
5. Savings and Loan Mortgage Loans (T\$) ¹	741479.	770474.	776172.	788526.	785208.	778334.	762153.	760622.	766593.	765708.	758938.	760041.	
6. Savings and Loan Deposits (T\$)	788448.	842740.	874533.	891585.	911587.	904212.	921642.	907758.	893087.	895889.	921290.	960250.	
7. Prime Interest Rate ²	12.2	20.3	18.0	20.0	20.0	15.8	16.2	16.2	13.5	11.8	10.5	10.5	

¹Only members of the Federal Home Loan Bank Board are included.²Rate is for the last month of the quarter.

Sources: Series 1-4: Wyoming State Bank Examiner Quarterly Report.

Series 5-6: Federal Home Loan Bank of Seattle, Monthly Report. Comparative statistical analysis of member institutions.

Series 7: U.S. Department of Commerce, Bureau of Economic Analysis. Survey of Current Business. Published Monthly.

Table 11: Business Conditions

Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83
1. New Domestic Corporations	348.	429.	424.	459.	459.	400.	389.	428.	403.	377.	348.	410.
2. New Foreign Corporations	252.	239.	294.	357.	356.	358.	357.	326.	285.	272.	240.	259.
3. Total New Corporations	600.	668.	718.	816.	815.	758.	746.	754.	688.	649.	588.	669.
4. Business Failures	29.	23.	40.	25.	27.	33.	31.	46.	54.	58.	47.	66.
5. Value of Business Failures (\$)	5306348.	1054339.	1674135.	-635217. ¹	-240995. ¹	2987139.	2331991.	6842595.-13034324. ¹	-6860186. ¹	6438421.	6726747.	
6. Personal Bankruptcies	105.	111.	132.	104.	96.	85.	96.	125.	123.	122.	140.	152.

¹Assets exceed liabilities.

Sources: Series 1-3: Secretary of State. New and Foreign Corporations. Monthly report.

Series 4-6: Cheyenne Credit Bureau. Wyoming bankruptcy cases, business failures, and value of failures. Weekly publication.

Table 12: Construction

Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83
1. New Residential Dwelling Units	1240.	965.	777.	978.	1072.	784.	851.	1050.	914.	699.	675.	1113.
2. Value of Residential Dwellings Constructed (M\$)	69.0	42.0	40.2	56.1	67.8	40.4	40.4	58.6	53.1	42.3	49.3	75.1
3. Value of Nonresidential Construction (M\$)	31.2	37.2	42.6	68.5	63.1	57.6	25.2	59.8	63.1	35.2	38.0	54.4
4. Building Permits Issued in Selected Wyoming Cities	3414.	2637.	3027.	4040.	3755.	2516.	2317.	3353.	3930.	2473.	2762.	3586.
5. Value of Authorized Construction	80648.	52550.	68995.	63557.	91789.	53839.	49768.	62939.	83595.	35383.	37119.	46402.
6. Mortgage Interest Rate ¹	11.95	12.86	13.48	14.12	14.69	15.23	14.93	14.74	14.34	13.09	12.97	11.95

¹Conventional first mortgage for new home purchase. U.S. average for last month of quarter.

Sources: Series 1-3: F.W. Dodge Division of McGraw-Hill. "Dodge Construction Potentials." Published monthly.
 Series 4-5: Institute for Policy Research. "Local Construction Reports." Survey of authorized construction in selected cities conducted monthly.
 Series 6: U.S. Department of Commerce, Bureau of Economic Analysis. Survey of Current Business. Published monthly.

Table 13: Consumers

Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83
1. New Truck Registrations	4353.	3706.	3723.	4175.	4067.	3502.	4176.	3636.	3024.	3230.	3233.	3415.
2. New Car Registrations	4859.	4839.	4926.	4879.	4664.	3808.	4249.	4042.	3506.	3610.	3272.	3539.
3. Wyoming Personal Income (M\$)	1409.	1303.	1337.	1403.	1477.	1474.	1476.	1516.	1465.	1470.	1398.	INA ¹
4. US Disposable Income ² (B\$)	1846.	1908.	1968.	2010.	2092.	2121.	2128.	2159.	2192.	2228.	2256.	2303.
5. US Personal Income ³ (M\$)	543122.	579903.	581161.	601311.	615581.	632052.	620600.	641570.	647457.	657199.	651843.	INA ¹
6. Latest US Consumer Price Index (1967=100)	251.9	258.7	265.2	271.4	279.1	281.1	282.5	290.1	292.8	292.0	293.0	297.2
7. Quarter's Average US CPI	249.8	256.4	263.1	269.1	276.7	280.4	281.9	286.8	292.3	292.9	292.5	296.1
8. Liquor Sales (T\$)	8951.	11280.	6845.	9397.	9396.	11365.	7789.	9057.	8917.	10464.	7102.	7868.

¹Personal income figures were not available for the months of May, 1983 and June, 1983 at the time of printing. For April, 1983, personal income in Wyoming was 472 million dollars, compared to 500 million dollars in April, 1982. Total U.S. Personal Income for April, 1983 was 220,601 million dollars, up 5.1 percent from April, 1982.

²Revised series. Estimates of the national income and product accounts, of which disposable personal income is a part, have been revised by the U.S. Department of Commerce for the last three years. As is usually done in July, new source data have been incorporated and seasonal factors have been updated. More information regarding the revisions can be found in the July, 1983 issue of the U.S. Department of Commerce publication Survey of Current Business.

³Number shown is for the last month of the quarter. CPI shown is the index for wage earners and clerical workers, not the CPI-U.

Sources: Series 1-2: R.L. Polk and Company Motor Statistical Division. "National New Vehicle Registration Service." Published monthly.
 Series 3,5: Business Week. Monthly personal income for states, regions, and the U.S. Reported monthly.
 Series 4,6,7: U.S. Department of Commerce, Bureau of Economic Analysis. Survey of Current Business. Published monthly.
 Series 8: Wyoming Liquor Commission. Sales data are reported to IPR.

Table 14: Employment and Labor¹

Calendar Quarters		3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	
1.	Civilian Labor Force	244355.	240566.	236480.	255956.	260041.	247523.	243298.	257820.	258974.	251909.	250727.	270361.
2.	Employment	235404.	230685.	225414.	246075.	251110.	237402.	230717.	243696.	243798.	233790.	224223.	242945.
3.	Unemployment	8951.	9881.	11066.	9881.	8931.	10121.	12581.	14123.	15177.	18120.	26503.	27416.
4.	Unemployment Rate	3.7	4.1	4.7	3.9	3.4	4.1	5.2	5.5	5.9	7.2	10.6	10.1
5.	Initial Claims Filed	4745.	7494.	8231.	5901.	5463.	8837.	11237.	11225.	10894.	14183.	15650.	11576.
6.	Applications Received	12727.	9584.	13026.	13522.	13884.	10537.	12070.	14838.	15359.	13102.	12950.	11787.
7.	New Non-Agricultural Openings	11068.	7526.	6912.	9903.	12991.	8010.	6119.	8344.	9190.	7035.	4724.	6185.
8.	New Non-Agricultural Placements	9218.	6482.	5649.	7681.	10072.	6931.	5138.	7161.	8079.	5450.	4106.	6608.
9.	Miners' Average Weekly Hours	44.1	43.3	43.8	42.8	41.5	42.5	42.0	41.7	39.7	38.1	39.8	38.5
10.	Miners' Average Weekly Pay (\$)	438.97	429.26	448.66	453.75	447.13	459.64	476.53	480.37	471.92	464.35	484.66	472.75
11.	Miners' Average Hourly Wage (\$)	9.95	9.91	10.24	10.61	10.78	10.81	11.34	11.52	11.90	12.18	12.17	12.29

¹The most recent year's data are preliminary.

Sources: Series 1-11: Wyoming Employment Security Commission. Labor Force Trends. Published Quarterly.

Table 15: Energy and Mineral Production

Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83
1. Wyoming Coal (TST)	20297.	20799.	25901.	24574.	25108.	23556.	26586.	25809.	24257.	23292.	23980.	24746.
2. U.S. Coal (TST)	193760.	216015.	206426.	145696.	235672.	224793.	219743.	209771.	194158.	185857.	189251.	180439.
3. Wyoming Oil (TBPD)	354.	361.	357.	358.	358.	358.	358.	354.	353.	340.	335.	334.
4. U.S. Oil (TBPD)	8565.	8554.	8583.	8548.	8550.	8566.	8629.	8657.	8639.	8652.	8648.	8663.
5. Wyoming Natural Gas (MCFD)	901.	1232.	1358.	1717.	1124.	1074.	1028.	1426.	972.	1181.	1224.	INA
6. U.S. Natural Gas (MCFD)	51777.	55776.	56830.	55120.	54357.	54323.	55357.	51242.	48183.	48133.	48558.	INA

Sources: Series 1,2,5, and 6: U.S. Department of Energy. Energy Data Reports. Gas data are published monthly, and coal data are published weekly.
Series 3-4: The Oil and Gas Journal. U.S. and Wyoming Oil Production published weekly.

Table 16: Government

Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83
1. Sales and Use Tax Collections (M\$)	59626.	57547.	58605.	64136.	66012.	68766.	73830.	66759.	65903.	61208.	56909.	46453.
2. Violent Crime ¹	496.	439.	420.	468.	599.	553.	373.	389.	411.	295.	301.	274.
3. Nonviolent Crime ²	5710.	4916.	5430.	5783.	6111.	5299.	4811.	5778.	6346.	5093.	4802.	4821.
4. Stolen Property (T\$)	3945.	3696.	3601.	4471.	4421.	3201.	3541.	4562.	3982.	2963.	3176.	2918.
5. Stolen Property Recovery Rate	41.9	46.8	36.0	45.4	40.6	58.6	46.9	49.3	42.8	42.8	46.5	36.9
6. Percent of Crimes Cleared ³	19.0	23.4	21.6	23.4	19.5	22.3	24.9	21.0	20.1	21.3	22.8	21.8

¹Murder, negligent homicide, forcible rape, robbery, aggravated assault.

²Burglary, larceny, auto theft.

³Clearance of a crime indicates resolution of a complaint by arrest or other extraordinary means.

Sources: Series 1: Wyoming Department of Revenue and Taxation, Sales and Use Tax Division. "Net Collections by Business Class by County." Published monthly.

Series 2-6: Uniform Crime Reporting Center for Criminal Justice Research, Division of Criminal Identification, Office of the State Attorney General. "Crime in Wyoming." Published quarterly.

Table 17: Tourism

Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83
<u>Visitors, National Parks and Monuments</u>												
1. Yellowstone	1323837.	144039.	74693.	609642.	1715175.	149682.	82758.	600071.	1614242.	116082.	65368.	553986.
2. Grand Teton	2055989.	412817.	206147.	847464.	2147775.	393843.	185935.	820236.	2066704.	371007.	183675.	686326.
3. Devil's Tower	144042.	12346.	13425.	63064.	205660.	18159.	9425.	86305.	161989.	13232.	8912.	87506.
4. Fossil Butte	6857.	1421.	339.	3795.	7769.	1018.	596.	6691.	10303.	1601.	626.	5134.
5. Fort Laramie	52608.	6337.	6309.	40192.	64598.	10190.	5037.	31447.	51881.	6906.	4887.	28311.
6. Big Horn NRA-South ¹	49499.	35422.	18509.	34846.	56566.	27820.	17701.	42059.	53839.	30720.	13426.	44977.
<u>Other Tourism Indicators</u>												
7. Traffic Count (Avg. # of Vehicles/Day)	154224.	99772.	86957.	125992.	169095.	103438.	103864.	126037.	166170.	97892.	84187.	122665.
8. Hotel, Motel, and Camp Sales Tax (T\$)	2326.	1315.	1036.	1272.	2073.	1447.	1247.	1273.	2226.	1323.	912.	1048.
9. Gasoline Sales (TCL)	101005.	83626.	74027.	93721.	109335.	87500.	72548.	93556.	108733.	81347.	70457.	79000. ²

¹Big Horn Canyon N.R.A. is only partially in Wyoming. Only visitation for the Wyoming part is shown.

²Estimated from trend and April and May data.

Sources: Series 1-6: Monthly visitor use reports of the National Park Service.

Series 7: Traffic Survey Unit - Planning Branch, Wyoming State Highway Department. "Selected Recording Stations Traffic Counter Data." Published monthly.

Series 8: Wyoming Department of Revenue and Taxation monthly report.

Series 9: Petroleum Association of Wyoming. Monthly Gasoline Gallonage Report.

Table 18: Utilities¹

Calendar Quarters	3/80	4/80	1/81	2/81	3/81	4/81	1/82	2/82	3/82	4/82	1/83	2/83
1. Residential Electric Connections	160950.	166342.	168477.	169494.	169777.	174369.	174018.	174126.	177081.	177968.	179111.	179717.
2. Residential Electric Consumption (TKWH)	264960.	335159.	487386.	331256.	282226.	218361.	504636.	375401.	302786.	391638.	489892.	392223.
3. Commercial Electric Connections	28072.	28847.	29465.	29605.	30522.	30047.	30833.	31086.	30841.	30388.	30772.	31194.
4. Commercial Electric Consumption (TKWH)	287954.	271561.	298580.	288617.	317998.	303091.	354594.	319879.	331351.	327961.	351633.	327565.
5. Industrial Electric Connections	3057.	3312.	3377.	3384.	3484.	3590.	3581.	3451.	3702.	3751.	3647.	3667.
6. Industrial Electric Consumption (TKWH)	1013672.	1049382.	1100964.	1097628.	1112398.	1156967.	1266782.	1179112.	1178792.	1225845.	1471528.	1388817.
7. Other Connections	3875.	3946.	3579.	3266.	4102.	3652.	4520.	4778.	3243.	2857.	2819.	3059.
8. Other Consumption (TKWH)	80540.	55639.	30333.	45006.	72994.	79409.	48237.	31570.	70139.	12240.	6780.	8710.
9. Residential Natural Gas Connections	69297.	72468.	73639.	73712.	72966.	74828.	75677.	75413.	74861.	75955.	76567.	76449.
10. Residential Natural Gas Consumption (TCF)	787701.	2770400.	3923502.	2180779.	814900.	2499236.	4607468.	2504865.	872772.	2972244.	6531664.	8926691.
11. Commercial Natural Gas Connections	6360.	6561.	6595.	6557.	6385.	6393.	6482.	6552.	6452.	6476.	6873.	6869.
12. Commercial Natural Gas Consumption (TCF)	347976.	1125956.	1766515.	970295.	382137.	943319.	1955899.	1075767.	385052.	1196763.	3667569.	5716746.
13. Industrial Natural Gas Connections	91.	93.	92.	94.	90.	89.	89.	90.	90.	95.	97.	97.
14. Industrial Natural Gas Consumption (TCF)	9887644.	7647357.	7345317.	5607535.	4959825.	7479593.	7328389.	5335475.	5564715.	7918440.	7626560.	0221456.
15. Other Natural Gas Connections	342.	363.	348.	344.	349.	398.	400.	404.	409.	409.	48.	48.
16. Other Natural Gas Consumption (TCF)	98459.	204268.	252249.	147575.	87695.	196349.	299920.	134722.	44697.	138389.	176.	322.
17. Business Telephone Connections	44319.	44702.	45795.	45495.	47932.	47828.	48501.	49003.	49179.	48824.	48052.	46102.
18. Private Telephone Connections	153874.	156290.	158740.	159456.	160688.	163100.	163790.	162953.	162126.	162394.	160658.	155637.

¹Some small utilities do not report, hence the data are slightly less than actual state totals. The data are consistent. The same utilities' reports are included in each figure.

"Other" includes agriculture, municipal, and other public.

*Figures for the first and second quarter of 1983 reflect a change in the authority connections/consumption made by the Northern Utilities. Prior to January 1983, the company listed public authority under the category of other natural gas connections/consumption. Northern Gas now combines public authority connections/consumption with their commercial natural gas connections/consumption.

Sources: Series 1-18: Reports to IPR by selected electric, natural gas, and telephone utility companies. Survey conducted monthly.

Wyoming Comparative Cost of Living Index* (July 6-8): Cheyenne = 100

City	Rank	All Items	Food	Housing	Transportation	Medical
Jackson	1	122.75	112.96	149.35	103.10	108.66
Gillette	2	120.73	114.77	145.50	104.60	106.56
Evanston	3	117.01	103.16	141.07	102.72	102.89
Kennerly	4	112.81	104.88	129.02	100.25	105.61
Casper	5	109.94	111.09	113.38	107.86	110.86
Rock Springs	6	108.92	110.76	115.56	103.08	105.67
Sundance	7	108.82	108.12	119.63	97.44	101.99
Wheatland	8	106.43	109.65	110.49	102.59	100.58
Pinedale	9	106.00	110.22	108.35	100.93	104.24
Sheridan	10	105.51	111.17	107.56	99.18	102.05
Laramie	11	104.52	106.52	109.99	99.39	97.37
Cody	12	104.00	117.52	101.07	101.38	100.62
Douglas	13	103.87	103.08	105.63	103.22	105.90
Buffalo	14	103.28	109.87	102.32	97.10	103.62
Newcastle	15	103.01	105.78	105.13	99.98	107.03
Rawlins	16	102.06	107.69	103.33	102.04	98.70
Thermopolis	17	101.53	113.90	97.31	98.25	102.29
Riverton	18	101.08	103.75	100.38	100.80	101.44
Cheyenne	19	100.00	100.00	100.00	100.00	100.00
Worland	20	99.81	110.42	95.31	98.19	102.11
Lusk	21	98.21	107.16	89.14	99.09	100.35
Greybull	22	97.98	112.60	85.14	100.96	101.44
Torrington	23	94.31	102.73	84.05	97.48	102.15

*Apparel and Recreation Indices not shown.

Source: Wyoming Department of Administration and Fiscal Control.

Comparison of Wyoming to the Nation and Neighboring States Per Capita Personal Income:
U.S.A., Wyoming, and Surrounding States

STATE	1976	1977	1978	1979	1980	1981
Wyoming	6,791	7,535	8,649	9,767	10,791	11,733
Colorado	6,504	7,097	8,008	9,016	10,009	11,216
Idaho	5,650	6,089	6,843	7,363	8,102	8,937
Montana	5,763	6,161	7,076	7,633	8,420	9,412
Nebraska	6,209	6,747	7,596	8,633	8,954	10,366
South Dakota	5,100	5,837	6,648	7,480	7,734	8,837
Utah	5,304	5,820	6,459	7,067	7,626	8,322
U.S.A.	6,367	6,984	7,776	8,657	9,483	10,495

Population as a Percent of U.S.A.: Wyoming and Surrounding States

STATE	1976	1977	1978	1979	1980	1981
Wyoming	.182	.187	.194	.201	.209	.215
Colorado	1.210	1.227	1.246	1.269	1.278	1.293
Idaho	.394	.402	.410	.415	.417	.418
Montana	.349	.351	.353	.351	.347	.346
Nebraska	.712	.707	.703	.697	.692	.688
South Dakota	.316	.314	.310	.307	.304	.299
Utah	.585	.599	.614	.631	.648	.662

Personal Income by Place of Residence as a Percent of U.S.A.:
Wyoming and Surrounding States

STATE	1976	1977	1978	1979	1980	1981
Wyoming	.194	.202	.216	.227	.238	.240
Colorado	1.236	1.247	1.283	1.321	1.349	1.382
Idaho	.350	.351	.361	.353	.356	.356
Montana	.316	.310	.321	.310	.308	.310
Nebraska	.694	.683	.686	.695	.653	.679
South Dakota	.253	.262	.265	.265	.248	.252
Utah	.487	.499	.510	.515	.521	.525

State Per Capita Personal Income as a Percent of U.S. Per Capita Personal Income:
Wyoming and Surrounding States

STATE	1976	1977	1978	1979	1980	1981
Wyoming	106.66	107.89	111.23	112.82	113.79	117.80
Colorado	102.15	101.62	102.98	104.15	105.55	106.87
Idaho	88.74	87.18	88.00	85.05	85.44	85.15
Montana	90.51	88.22	91.00	88.17	88.79	89.68
Nebraska	97.52	96.61	97.69	99.72	94.42	98.77
South Dakota	80.10	83.58	85.49	86.40	81.56	84.20
Utah	83.30	83.33	83.06	81.63	80.42	79.29

Per Capita Transfer Payments:
U.S.A., Wyoming, and Surrounding States

STATE	1976	1977	1978	1979	1980	1981
Wyoming	660.01	708.56	758.17	832.62	930.88	1024.96
Colorado	783.79	840.46	883.33	963.26	1107.82	1241.24
Idaho	749.99	788.83	819.05	918.73	1088.09	1223.76
Montana	801.99	867.56	932.20	1041.14	1231.93	1400.30
Nebraska	740.18	796.08	869.63	964.04	1117.69	1279.92
South Dakota	746.66	797.41	858.57	962.62	1124.90	1290.44
Utah	662.55	704.23	752.36	815.25	931.00	1035.98
U.S.A.	892.99	946.01	1007.87	1114.40	1308.51	1466.74

Format

For data available at least quarterly, the last 12 quarters are printed in WQU. In this edition, published series begin with the 3rd quarter of 1980, and end with the 2nd quarter of 1983. For other data series (primarily annual), the most recent observations, up to 12, are published in WQU. Most annual data series will reappear in WQU only when updated, or about every fourth issue. Quarters are calendar quarters. For example, the 3rd quarter is composed of July, August, and September. In the table headings and narratives, a particular quarter will be indicated by notation such as 2/80 (2nd quarter, 1980), 1/80 (1st quarter, 1980), and so on.

Beside each data series name is an abbreviation in parentheses. The abbreviation indicates the units (such as dollars, tons, feet, miles, etc.) of the data. The key to the units abbreviations is below.

Throughout WQU, all data are for the state unless otherwise stated. The most recent year's data should be viewed as preliminary, due to revisions. The acronym "INA" signifies that information is not available.

The reader should be attentive to the footnotes at the bottom of pages, particularly those accompanying a data table. The footnotes help the reader to properly interpret the data, and they also indicate when more detailed (by subject or by area) data than that which is shown is available from IPR. A list of sources follows the footnotes.

Key to Units Abbreviations

MBF - Thousand Board Feet	GL - Gallons
TKWH - Thousand Kilowatt Hours	TCF - Thousands of Cubic Feet
\$ - Dollars	KWH - Kilowatt Hours
M\$ - Millions of Dollars	TGL - Thousands of Gallons
B\$ - Billions of Dollars	HBBL - Hundreds of Barrels
T\$ - Thousands of Dollars	HMCF - Hundreds of MCF Per Day
H\$ - Hundreds of Dollars	HST - Hundreds of Short Tons
ST - Short Tons	\$/ST - Dollars Per Short Ton
TST - Thousands of Short Tons	
MCFD - Million Cubic Feet Per Day	
TBPD - Thousands of Barrels Per Day	

RECENTLY PUBLISHED WYOMING RELATED RESEARCH REPORTS

THE WYOMING ECONOMY: HISTORICAL TRENDS AND PROJECTIONS by Shelby Gerking and John Merrifield Available Now	No Charge
ANALYSIS OF THE LONG-TERM IMPACTS AND BENEFITS OF GRAND TETON NATIONAL PARK ON THE ECONOMY OF TETON COUNTY, WYOMING by John Merrifield and Shelby Gerking Available Now	\$5.00*
EXPORTATION OF STATE AND LOCAL TAXES: A COMPARATIVE ANALYSIS by Shelby Gerking, William Morgan and John Mutt Available Now	\$5.00*
A STUDY OF EMPLOYER PREFERRED SKILLS AMONG GRADUATING BUSINESS STUDENTS OF THE UNIVERSITY OF WYOMING by Gary Benson Available Now	No Charge
CHANGING FEDERAL-STATE RELATIONS IN WATER RESOURCE PLANNING: THE CASE OF WYOMING by R. McGregor Cawley and Charles Davis Available Now	No Charge

*Prices reflect reproduction costs only.

HOW TO ORDER

Please mail your order together with payment (if necessary) to:

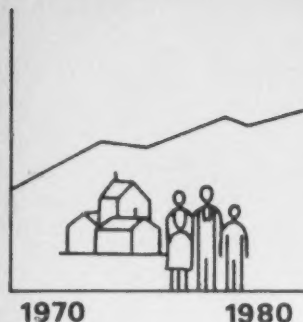
INSTITUTE FOR POLICY RESEARCH

Box 3925, University Station

Laramie, WY 82071

ATTN: Beth Daniels

Thank you



CRIS

Census Retrieval Information Service

P.O. Box 3925
Laramie, WY 82071
(307) 766-5141

Room 302
Emerson Building
Cheyenne, WY 82002
(307) 777-7504

U.S. Census information for Wyoming is handled by the Census Retrieval and Information Service (CRIS). CRIS issues printed reports of Wyoming Census data as well as handling specific requests. Much of the population and housing data from the 1980 Census is now available.

CRIS reports now available:

PRICE

- | | |
|---|-----------|
| #82-9-2: STF3, September 1982, 13 pages. List of tables available from STF3 tape. Partial labor force and income data for state, counties, and cities. | No Charge |
| #82-8: Age Distribution in Wyoming, 1980, August 1982, 120 pages. Analysis of age profiles in 5-year brackets.
Wyoming: Comparison with USA and with 1970. Indications of net in-migration by age. Prediction of 1990 peak at ages 30-34.
Counties: Maps of age distribution. Graphs of age profiles for each county.
Cities: Age profile for each city. | No Charge |
| #5: STF1, October 1981, 54 pages. 100% count data, 1980 population and housing: state, counties and cities. | No Charge |
| #6: Laramie People Patterns, January 1982, 11 pages. Minority distribution in Laramie by zoning and by age of neighborhood. | No Charge |

CRIS is a cooperative service provided by the Institute for Policy Research, University of Wyoming, and the Research and Statistics Division, Wyoming Department of Administration and Fiscal Control.

We are looking forward to assisting you in the future.

Judy Dennison and G. Fred Doll
Institute for Policy Research
University of Wyoming

Phil Kiner
Research and Statistics Division
Department of Administration and
Fiscal Control